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Occupational Highway Transportation Deaths Among Workers Aged ≥55 Years — United States, 2003–2010

Highway transportation incidents are the leading cause of occupational fatalities in the United States, with the highest fatality rates occurring among workers aged ≥65 years (*1*). To characterize older workers at highest risk, CDC analyzed data from the Census of Fatal Occupational Injuries (CFOI) for the period 2003–2010 (*2*) and compared occupational highway transportation deaths among workers aged 55–64 years and ≥65 years with those among workers aged 18–54 years. This report describes the results of that analysis, which indicated that workers aged ≥65 years had the highest overall fatality rate (3.1 highway transportation deaths per 100,000 full-time-equivalent [FTE] workers per year), more than three times that of workers aged 18–54 years (0.9 per 100,000 FTE workers). This pattern held across demographic and occupational categories. These results demonstrate the need to further implement interventions that consider road safety risks specific to older workers.

The U.S. Department of Labor Bureau of Labor Statistics (BLS) collects CFOI data from multiple sources. To be included in CFOI, the decedent must have been working, serving as a volunteer in a manner similar to a paid employee, or present at a site as a job requirement (*2*). As defined in this report, an occupational highway transportation death involved a motorized or nonmotorized vehicle and a worker aged ≥18 years, with the incident occurring on a public road, where the victim was the operator, passenger, or a pedestrian struck in or on the side of the road. Deaths while traveling between work locations are included in CFOI, whereas those during commuting to and from work are not. Fatality rates were calculated using estimates of the employed labor force from the Current Population Survey for FTE workers aged ≥18 years as denominators (*3*). Poisson regression methods were used to estimate fatality rates and 95% confidence intervals (CIs).

During 2003–2010, a total of 11,587 workers aged ≥18 years in the United States died in occupational highway transportation incidents, of whom 3,113 (26.9%) were aged ≥55 years. Overall, fatality rates were highest among workers aged ≥65 years (3.1 deaths per 100,000 FTE workers), followed by those aged 55–64 years (1.4 deaths per 100,000 FTE workers) (Table). Over time, fatality rates remained relatively stable for workers aged 18–54 and 55–64 years (Figure). For workers aged ≥65 years, a sharp decrease in risk was observed in 2008, but by the end of the study period, their risk for a transportation death remained more than three times the risk among those aged 18–54 years.

Risk for an occupational highway transportation death among American Indian/Alaska Native workers aged ≥65 years was more than four times the risk among those aged 18–54 years (Table). A similar pattern, although of lower magnitude, was observed among white and black workers. For Hispanic workers, the risk for an occupational highway transportation death among workers aged ≥65 years was more than twice the risk among workers aged 18–54 years; for non-Hispanic workers, the risk among workers aged ≥65 years was more than three times the risk among workers aged 18–54 years.

By primary industry, workers in transportation and warehousing accounted for a third of all deaths and had the highest

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rates across all age groups: 6.5, 10.6, and 21.2 for ages 18–54, 55–64, and ≥65 years, respectively (Table). By primary occupation, rates were highest in transportation and material moving occupations for all age groups: 7.4, 12.9, and 22.9 for ages 18–54, 55–64, and ≥65 years, respectively, and these occupations accounted for one half of all deaths.

The distribution of events leading to highway transportation deaths was similar across all age groups, with collisions between vehicles accounting for the largest proportion of deaths in each age group: 43%, 43%, and 48% for ages 18–54, 55–64, and ≥65 years, respectively. Across all age groups, driving a vehicle was the most common work activity being performed by the decedent. Proportions of pedestrian deaths were small: 12%–13% in all age groups. Among workers aged ≥65 years, the type of vehicle most often involved was an automobile (23%), semi-tractor trailer truck (22%), or pickup truck (15%), and a greater proportion of deaths involved off-road and industrial vehicles (9%, compared with 2% for the other age groups). Higher proportions of deaths involving semi-tractor trailer trucks were observed for workers aged 18–54 years and 55–64 years (31% and 37%, respectively).

Reported by

Stephanie G. Pratt, PhD, Rosa L. Rodríguez-Acosta, PhD, Div of Safety Research, National Institute for Occupational Safety and Health, CDC. ***Corresponding contributor:*** *Stephanie G. Pratt, spratt@cdc.gov, 304-285-5992.*

Editorial Note

Rates of occupational highway transportation fatalities were higher among workers aged ≥55 years compared with those aged 18–54 years, with highest rates observed among workers aged ≥65 years. In contrast, motor vehicle fatality rates for adults in the general population, including pedestrians, only begin to increase substantially at age 75 years (*4*).* High frequency and rates of highway transportation death for workers in transportation industries and occupations were observed in all age groups.

The safety of older workers who drive motor vehicles at work is of particular concern for employers, health professionals, and occupational safety professionals for at least four reasons. First, older workers bring a wealth of skills and experience to the workplace, making contributions beyond the traditional retirement age of 65 years. Second, starting at age 60 years, drivers involved in a crash are more likely to die from crash-related injuries than are drivers aged <60 years. This greater susceptibility to fatal injury has been found to be more important than excess crash involvement in explaining higher death rates for crash-involved drivers (*5*). Third, the ability to drive is affected by physical and cognitive changes associated with normal aging: declines in visual acuity, skill in

* Direct comparisons between occupational highway transportation fatality rates and highway transportation fatality rates in the general population cannot be made because of differences in denominator data.

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TABLE. Number* and rate† of occupational highway transportation deaths, by age group and selected characteristics — United States, 2003–2010

	Aged 18–54 yrs			Aged 55–64 yrs			Aged ≥65 yrs		
Characteristic	No.	Rate	(95% CI)	No.	Rate	(95% CI)	No.	Rate	(95% CI)
Total	**8,474**	**0.9**	**(0.9–1.0)**	**2,065**	**1.4**	**(1.3–1.4)**	**1,048**	**3.1**	**(2.9–3.3)**
Sex									
Male	7,677	1.5	(1.4–1.5)	1,878	2.2	(2.1–2.3)	961	4.8	(4.5–5.1)
Female	197	0.2	(0.2–0.2)	187	0.3	(0.2–0.3)	87	0.6	(0.5–0.8)
Race									
White	6,920	0.9	(0.9–1.0)	1,778	1.4	(1.3–1.5)	945	3.2	(3.0–3.4)
Black	1,009	1.0	(0.9–1.1)	214	1.7	(1.5–2.0)	81	3.1	(2.5–3.9)
American Indian/Alaska Native	77	1.1	(0.9–1.4)	11	1.4	(0.7–2.8)	7	4.4	(2.0–9.6)
Asian	146	0.3	(0.3–0.4)	34	0.6	(0.4–0.8)	6	0.5	(0.2–1.1)
Other	322	2.2	(2.0–2.5)	28	1.8	(1.2–2.7)	9	3.0	(1.6–5.8)
Hispanic ethnicity									
Hispanic	1,260	0.9	(0.9–1.0)	136	1.2	(1.0–1.5)	50	2.0	(1.5–2.7)
Non-Hispanic	7,179	0.9	(0.9–0.9)	1,919	1.4	(1.3–1.5)	993	3.2	(3.0–3.4)
Primary industry§									
Agriculture, forestry, fishing, and hunting	396	3.1	(2.8–3.4)	112	3.6	(2.9–4.4)	155	7.8	(6.5–9.4)
Construction	1,286	1.7	(1.7–1.9)	236	2.7	(2.3–3.1)	86	5.0	(4.0–6.2)
Leisure and hospitality	183	0.3	(0.2–0.3)	34	0.5	(0.3–0.7)	20	0.9	(0.6–1.5)
Manufacturing	364	0.3	(0.3–0.4)	108	0.6	(0.5–0.7)	40	1.5	(1.1–2.0)
Administrative support and waste management services	659	1.7	(1.6–1.9)	90	1.8	(1.4–2.2)	41	3.1	(2.3–4.3)
Mining	237	4.3	(3.8–4.9)	42	5.1	(3.7–7.1)	17	13.4	(8.2–21.9)
Other services¶	829	0.3	(0.3–0.3)	241	0.4	(0.4–0.5)	147	1.1	(0.9–1.3)
Professional, scientific, and technical services	140	0.2	(0.2–0.3)	39	0.4	(0.3–0.6)	20	0.8	(0.5–1.3)
Public administration	807	1.6	(1.4–1.7)	123	1.2	(1.0–1.4)	63	3.8	(2.8–5.0)
Retail trade	364	0.4	(0.3–0.4)	84	0.6	(0.5–0.7)	102	2.3	(1.8–2.8)
Transportation and warehousing	2,659	6.5	(6.3–6.8)	824	10.6	(9.8–11.4)	304	21.2	(18.8–23.8)
Utilities	64	0.8	(0.6–1.0)	13	0.8	(0.5–1.5)	3	1.8	(0.6–5.8)
Wholesale trade	476	1.6	(1.5–1.7)	117	2.3	(1.9–2.8)	49	4.5	(3.4–6.1)
Primary occupation**									
Construction and extraction	1,077	1.8	(1.7–1.9)	166	2.7	(2.3–3.2)	50	4.6	(3.4–6.1)
Farming, fishing, and forestry	196	3.0	(2.6–3.4)	38	4.5	(3.2–6.4)	21	8.1	(5.2–12.7)
Installation, maintenance, and repair	364	1.0	(0.9–1.1)	60	1.1	(0.9–1.5)	17	2.0	(1.2–3.3)
Management, business, and finance	453	0.3	(0.3–0.3)	162	0.5	(0.4–0.6)	173	2.5	(2.1–2.9)
Office and administrative	172	0.2	(0.1–0.2)	63	0.3	(0.2–0.4)	48	1.2	(0.8–1.6)
Production	115	0.2	(0.2–2.3)	24	0.2	(0.2–0.4)	16	1.0	(0.6–1.7)
Professional	171	0.3	(0.3–0.4)	37	0.5	(0.3–0.7)	8	0.7	(0.3–1.4)
Sales and related	380	0.4	(0.3–0.4)	91	0.5	(0.4–0.7)	73	1.5	(1.2–1.9)
Services	1,336	0.5	(0.5–0.5)	253	0.5	(0.5–0.6)	136	1.2	(1.0–1.5)
Transportation and material moving	4,138	7.4	(7.2–7.6)	1,166	12.9	(12.0–13.7)	505	22.9	(20.9–25.2)

Abbreviation: CI = confidence interval.

* Counts of highway transportation fatalities were generated with restricted access to the Bureau of Labor Statistics' Census of Fatal Occupational injuries (CFOI) microdata. Fatality counts include deaths to workers aged ≥18 years, volunteer workers, and resident military personnel. Additional information is available at http://www.bls.gov/iif/oshcfoi1.htm.

† Rate per 100,000. Labor force denominator estimates from the Current Population Survey (CPS) for U.S. full-time equivalent (FTE) workers aged ≥18 years were used to calculate fatality rates; one FTE = 2,000 hours worked per year (additional information available at http://www.bls.gov/cps/home.htm). Volunteer workers and resident military personnel are not included in rate calculations to maintain consistency with CPS employment figures.

§ Excludes 13 fatalities with unknown primary industry.

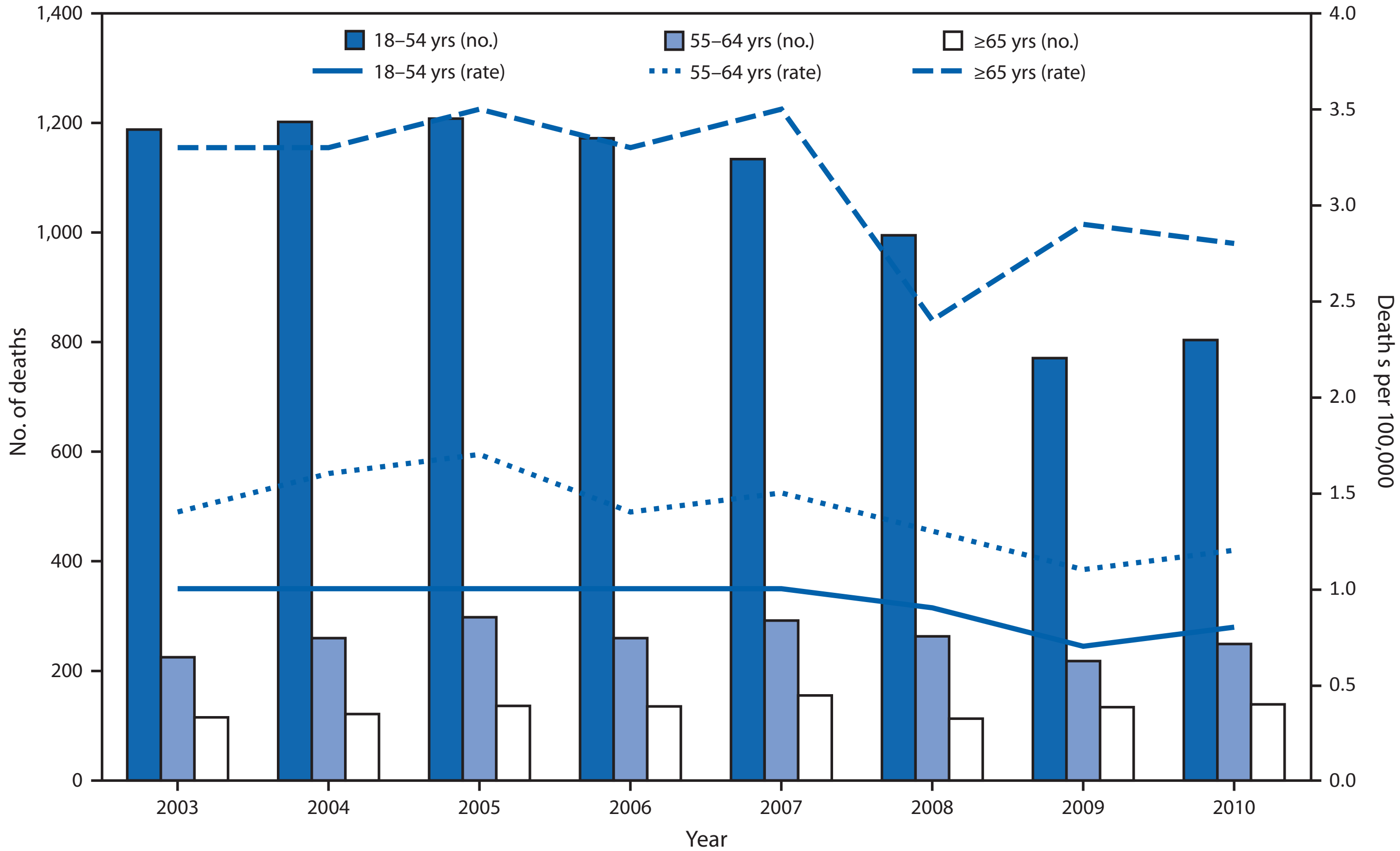
¶ Includes education and health, finance and insurance, information, real estate, rental and leasing, and other.

** Excludes 14 fatalities with unknown primary occupation and 61 fatalities in military occupations.

processing complex visual information, reaction time, executive functioning, and contrast and glare sensitivity; and higher prevalence of comorbid conditions (*6*). These factors might be addressed by employers through injury prevention and wellness programs, and by workers through regular health examinations and screenings. Finally, the size of the U.S. workforce aged ≥55 years is projected to increase from approximately 15 million in 1990 to 41 million in 2020, comprising 25.2% of the workforce in 2020, compared with 11.9% in 1990 (*7*). Therefore, this problem is likely to increase.

Modifiable behavioral and environmental risk factors for occupational highway transportation deaths include long

FIGURE. Number* and rate† of occupational highway deaths, by year and age group — United States, 2003–2010



* Counts of highway transportation fatalities were generated with restricted access to the Bureau of Labor Statistics' Census of Fatal Occupational injuries (CFOI) microdata. Fatality counts include deaths to workers aged ≥18 years, volunteer workers, and resident military personnel. Additional information is available at http://www.bls.gov/iif/oshcfoi1.htm.

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hours of work, fatigue, occupational stress, time pressure, distracted driving, and nonuse of seat belts (*1*). Interventions to mitigate these risk factors will benefit drivers of all ages. U.S. Department of Transportation regulations for drivers of large trucks and buses address many of these risk factors already.† In contrast, occupational drivers in nontransportation occupations more commonly use lighter-weight or personal vehicles such as cars and pickup trucks. Conditions of occupational use of these vehicles are largely unaddressed by occupational safety regulations issued by the federal or state governments. Additional interventions of particular benefit to all older drivers include the following: selection and adaptation of vehicles to better accommodate them; policies encouraging less driving overall, less nighttime driving, and alternative modes of transportation; route and trip planning to reduce stress and fatigue; refresher driver training; and provision of information about medical conditions and medications known to affect driving ability (*8*). Employers also should consider allowing drivers to use their judgment to reschedule travel or stop driving in cases of fatigue, illness, bad weather, or darkness (*6*). For workers who stand or walk near roadways, educational or training strategies are needed to assist older workers in compensating for age-related perceptual or cognitive deficits (*9*), but few evidence-based interventions are ready for employers to implement. Prevention of work-related motor vehicle crashes is a shared responsibility between employers and workers, and both groups should take an active role in developing and implementing prevention strategies.

The findings in this report are subject to at least five limitations. First, no data on nonfatal crashes and injuries were available to make comparisons with the fatality data provided by CFOI. Second, because the denominator source (the Current Population Survey) is a monthly telephone survey of

† Information available at http://www.fmcsa.dot.gov.

households, it might underestimate the number of employed workers, especially those without permanent addresses, telephone access, or documentation of legal residency. Underestimating the employed workforce would result in overestimating the fatality rates presented in this report. Third, small numbers of deaths in some cells mean that their associated estimates of risk are unstable. Fourth, fatality rates do not account for time or distance traveled by workers in performing their jobs. Using time or distance as a rate denominator could provide different assessments of risk by employment and demographic characteristics. Finally, CFOI includes persons determined to be at work but excludes commuters. In some instances, the distinction between work travel and commuting might be unclear. Moreover, excluding commuting-related crashes underestimates the contribution of work-related travel to the overall toll of road traffic crashes.

Preventing workplace motor vehicle crashes depends on compliance with safety regulations and traffic laws, supplemented by employer-led safety initiatives and worker participation. Higher rates of highway transportation deaths for workers aged 55–64 and ≥65 years across industries and occupations support the need for employers to address specific needs and risks among older drivers in their road safety management programs and policies and in health and wellness programs. Resources are available to assist employers, health professionals, and older workers reduce the risk for motor vehicle crashes and injuries (*10*).

What is already known on this topic?

Highway transportation crashes are the leading cause of occupational fatalities in the United States, with the highest fatality rates occurring among workers aged ≥65 years.

What is added by this report?

Analysis of data from the Census of Fatal Occupational Injuries for the period 2003–2010 indicated that workers aged ≥65 years had the highest overall fatality rate (3.1 highway transportation deaths per 100,000 full-time-equivalent workers per year), more than three times the rate among workers aged 18–54 years. This pattern was consistent across all but one demographic group and in every industry and occupation.

What are the implications for public health practice?

Employers, health professionals, and workers need to work together to reduce risks for injury and death from highway transportation crashes among older workers. Recommended interventions to prevent crashes and injuries among older workers (e.g., trip planning, refresher driving training, and health screening and promotion) should be more widely disseminated and implemented.

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Japanese Encephalitis Surveillance and Immunization — Asia and the Western Pacific, 2012

Japanese encephalitis (JE) virus is a leading cause of encephalitis in Asia, causing an estimated 67,900 JE cases annually. To control JE, the World Health Organization (WHO) recommends that JE vaccine be incorporated into immunization programs in all areas where JE is a public health problem. For many decades, progress mainly occurred in a small number of high-income Asian countries. Recently, prospects for control have improved with better disease burden awareness as a result of increased JE surveillance and wider availability of safe, effective vaccines. This report summarizes the status of JE surveillance and immunization programs in 2012 in Asia and the Western Pacific. Data were obtained from the WHO/United Nations Children's Fund (UNICEF) Joint Reporting Form (JRF), published literature, meeting reports, and websites. In 2012, 18 (75%) of the 24 countries with areas of JE virus transmission risk conducted at least some JE surveillance, and 11 (46%) had a JE immunization program. Further progress toward JE control requires increased awareness of disease burden at the national and regional levels, availability of WHO-prequalified pediatric JE vaccines, and international support for surveillance and vaccine introduction in countries with limited resources.

JE is a mosquito-borne disease with a 20%–30% case-fatality rate and neurologic or psychiatric sequelae in 30%–50% of survivors (*1*). JE virus is transmitted in an enzootic cycle between mosquitoes and amplifying vertebrate hosts, primarily pigs and wading birds. Humans are incidental hosts in the JE virus transmission cycle. In endemic regions, JE occurs mainly among children aged ≤15, years and risk is highest in rural, agricultural areas. No specific treatment for JE is available. Although the use of insecticides and improvements in agricultural practices (e.g., centralized pig production) might contribute to reduction of disease incidence, vaccination is the single most important preventive measure (*2*). Twenty-four WHO member states have areas of JE virus transmission risk (Figure) (*1*). Risk areas are determined based on any evidence of JE virus transmission from human surveillance, mosquito or animal studies, or ecologic similarity to areas with proven transmission.

Information on JE surveillance and immunization programs was obtained from JRF reports for 2012, from JRF reports for 2011 of reported cases (because 2012 data were incomplete) (*3*), reports from the Fifth Biregional Meeting on JE Prevention and Control and the Third JE Laboratory Network Meeting in the Western Pacific Region in 2011 (*4,5*), Ministry of Health websites, and published English-language literature. Information collected on JE surveillance programs included strategies, age groups, diagnostic testing availability, case numbers reported on the JRF, and use of the WHO case definition for acute encephalitis syndrome (AES) to identify suspected cases. WHO defines AES as the acute onset of fever and either altered mental status, new onset of seizures, or both; an AES case in which laboratory testing confirms acute JE virus infection is considered a JE case (*6*). For JE immunization programs, data collected included program strategies, ages for routine vaccination, and vaccines used.

Surveillance programs

In 2012, 18 (75%) of the 24 countries with JE virus transmission risk conducted JE surveillance (Table 1). Five (21%) of the 24 countries conducted surveillance nationally or in appropriate geographic risk areas and routinely tested suspected cases for JE, six (25%) conducted national surveillance without laboratory confirmation of every suspected case, and seven (29%) conducted surveillance at sentinel sites. Countries with sentinel surveillance had a median of five surveillance sites (range: 2–125), and laboratory testing usually was available for suspected cases. Surveillance was conducted among all age groups in 16 (89%) of the 18 countries and only in children in two countries. The WHO AES case definition was used to identify suspected cases in seven countries.* The remaining 11 countries either used a locally developed surveillance case definition for encephalitis or meningitis/encephalitis, or clinicians were asked to investigate and report clinically compatible cases.

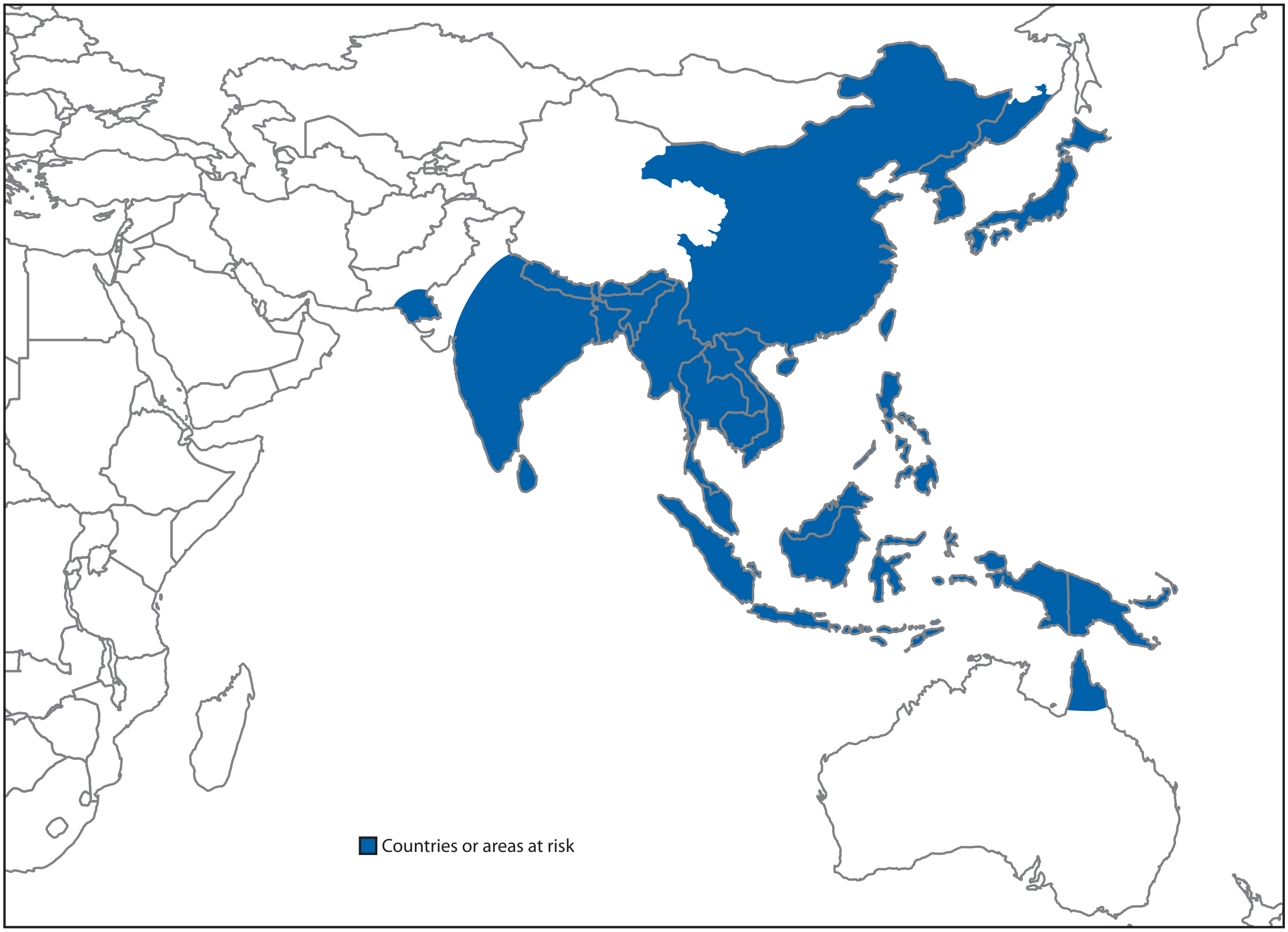
In 2011, 19 (79%) of the 24 countries reported a total of 10,426 JE cases. The 8,247 reported cases from India and 1,625 from China represented 95% of all cases; no other country reported >150 cases. Among five countries reporting zero cases, three had no surveillance program.

Immunization Programs

Eleven (46%) of the 24 countries with JE virus transmission risk had a JE immunization program in 2012. Seven (29%) programs were implemented nationally or in all areas considered to have JE risk, and four (17%) were subnational and did not include all risk areas (Table 2). Ten (42%) countries included JE vaccine in the routine vaccination schedule, and one country conducted annual vaccination campaigns. The scheduled age for beginning vaccination ranged from

* Bhutan, India, Laos, Burma (Myanmar), Nepal, Papua New Guinea, and the Philippines.

FIGURE. Geographic distribution of Japanese encephalitis, 2012



8 months to 3 years. Vaccines used included inactivated mouse brain–derived vaccines (five countries), live attenuated SA 14-14-2 vaccine (five countries), and inactivated Vero cell culture-derived vaccines (two countries).[†]

[†] Live attenuated SA 14-14-2 vaccine and inactivated Vero cell culture-derived vaccine were used on mainland China, and inactivated mouse brain–derived vaccine was used on Taiwan.

Reported by

Samir Baig, MD, Kimberley K. Fox, MD, Youngmee Jee, MD, Regional Office for the Western Pacific; Patrick O'Connor, PhD, Regional Office for South-East Asia; Joachim Hombach, PhD, Susan A. Wang, MD, World Health Organization. Terri Hyde, MD, Global Immunizations Div, Center for Global Health; Marc Fischer, MD, Susan L. Hills, MBBS, Div of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, CDC. ***Corresponding contributor:*** *Susan L. Hills, shills@cdc.gov, 970-221-6400.*

Editorial Note

Substantial progress has been made in JE surveillance and immunization programs since the 1990s. In 2012, three quarters of countries with JE virus transmission risk conducted JE surveillance and almost half had a JE immunization program. Previously, data were often only collected for short-term studies, and JE prevention activities were limited to a few countries (*7*). Recent progress has been spurred by an increase in funding, availability of improved vaccines, and growing international attention to the disease.

JE surveillance has improved in many countries in terms of data quality, numbers of surveillance sites, integration into national health systems, and use of a standard case definition (*8*). During the past 2 years, government surveillance programs have been newly established in the Philippines, Bhutan, and Papua New Guinea. WHO has developed a JE laboratory network that provides training workshops, technical support,

What is already known on this topic?

Japanese encephalitis (JE) virus is a leading cause of encephalitis in Asia. The World Health Organization recommends that JE vaccine be incorporated into immunization programs in all areas where JE is a public health problem. For many decades, progress with JE control mainly occurred in a small number of high-income Asian countries.

What is added by this report?

A review of surveillance and immunization program data in the 24 countries with JE virus transmission risk showed that in 2012, 18 of the countries performed at least some surveillance for JE, and 11 had a JE immunization program. This represents substantial progress, but many challenges remain.

What are the implications for public health practice?

To support further progress toward JE control, measures to maintain and improve awareness of JE disease burden, technical and financial support from international agencies and donors, and sustained national commitment are required.

proficiency testing, and confirmatory testing for 18 countries. Improved surveillance with better understanding of the burden and geographic extent of disease has resulted in greater recognition of JE as a public health problem in some countries (e.g., Laos), availability of data to support decision making on vaccine introduction (e.g., Cambodia), and better data to monitor the effectiveness of immunization programs and guide program expansion or improvement (e.g., Nepal).

Despite such progress, some countries still have limited data, and many challenges remain. JE case reporting is known to be incomplete and inaccurate. A recent review estimated that approximately 67,900 JE cases typically occur annually in this region, but in 2011, only 10,426 were reported (*1*). Although the case numbers reported on the JRF likely include some non-JE cases (AES cases without laboratory confirmation), underreporting of JE because of the limited scope of surveillance is a more important issue. Although sentinel surveillance is recommended where nationwide surveillance would be logistically complex or financially burdensome, it does not provide population-based disease burden estimates, and findings reflect disease patterns at sites that might be selected for operational rather than epidemiologic reasons. Incomplete laboratory confirmation of cases can occur when sample collection is inadequate or access to testing is limited. JE case counts are not comparable across countries because of varying use of laboratory confirmation. In addition, AES case numbers cannot be compared because of variability in clinical definitions used to identify cases, with the WHO AES case definition not used in the majority of countries that conduct surveillance.

WHO recommends that JE vaccination be extended to all areas where JE is a public health problem (*2*). The most effective

TABLE 1. Characteristics of Japanese encephalitis (JE) surveillance in countries with JE virus transmission risk, 2012

Country	JE surveillance program	Age groups under surveillance	Laboratory confirmation of cases
Australia*	Risk areas†	All	Yes
Bangladesh	Sentinel (2 sites)	All	Yes
Bhutan	Sentinel (5 sites)	All	Yes
Brunei Darussalam	None	—	—
Burma (Myanmar)	National	All	Partial
Cambodia	Sentinel (6 sites)	≤15 yrs	Yes
China	National§	All	Partial
Taiwan	All areas	All	Yes
India	Sentinel (~50 sites)	All	Partial
Indonesia	None	—	—
Japan	National	All	Yes
Laos	National	All	Partial
Malaysia	National	All	Partial
Nepal	Sentinel (125 sites)¶	All	Yes
North Korea	None	—	—
Pakistan	None	—	—
Papua New Guinea	Sentinel (2 sites)	≤12 yrs	Yes
Philippines	Sentinel (3 sites)	All	Yes
Russia*	None	—	—
Singapore	National	All	Yes
South Korea	National	All	Yes
Sri Lanka	National	All	Partial
Thailand	National	All	Yes
Timor-Leste	None**	—	—
Vietnam	National§	All	Partial

* JE virus transmission risk in well-defined, limited areas.
† Torres Strait Islands and northern Cape York.
§ Includes specified sentinel sites (24 in China and six in Vietnam) for comprehensive case-based surveillance with laboratory testing of every case.
¶ Sentinel sites located in every district in the country.
** Surveillance was implemented in 2009 but has not been maintained.

TABLE 2. Characteristics of Japanese encephalitis (JE) immunization programs in countries with JE virus transmission risk, 2012

Country	JE immunization program	Strategy	Scheduled age to begin routine immunization	Vaccine used
Australia*	Targeted risk areas†	Routine	12 mos	MB§
Bangladesh	None	—	—	—
Bhutan	None	—	—	—
Brunei Darussalam	None	—	—	—
Burma (Myanmar)	None	—	—	—
Cambodia	Subnational¶	Routine	10 mos	LAV
China	National**	Routine	8 mos	LAV, VC
Taiwan	All areas	Routine	15 mos	MB
India	Risk areas††	Routine	16–24 mos	LAV
Indonesia	None	—	—	—
Japan	National	Routine	36 mos	VC
Laos	None	—	—	—
Malaysia	Subnational	Routine and outbreak response¶¶	9 mos	MB
Nepal	Subnational***	Routine	12 mos	LAV
North Korea	N/A§§	N/A	N/A	N/A
Pakistan	None	—	—	—
Papua New Guinea	None	—	—	—
Philippines	None	—	—	—
Russia*	None	—	—	—
Singapore	None	—	—	—
South Korea	National	Routine	12–24 mos	MB
Sri Lanka	National	Routine	9 mos	LAV
Thailand	National	Routine	18 mos	MB
Timor-Leste	None	—	—	—
Vietnam	Subnational†††	Annual campaign	12 mos	MB

Abbreviations: N/A = no information available; LAV = live attenuated SA 14-14-2 JE vaccine; VC = inactivated Vero cell culture-derived JE vaccine; MB = inactivated, mouse brain–derived JE vaccine.

* JE virus transmission risk in well-defined, limited areas.
† Vaccination recommended for residents of the outer Torres Strait Islands or nonresidents living or working there for ≥30 days during the wet season.
§ Program was temporarily suspended when MB became unavailable in 2010 and will recommence when a new pediatric JE vaccine is available.
¶ Three provinces.
** Excluding the nonendemic provinces of Qinghai, Tibet, and Xinjiang.
†† Routine program implemented in districts that have conducted campaigns; campaigns conducted in 109 endemic districts in 15 states during 2006–2011, and repeated in nine districts in two states in 2010.
§§ Mass campaign was conducted in 2010.
¶¶ In Sarawak, vaccination is provided as part of the routine childhood immunization program; in peninsular Malaysia and Sabah, vaccination is provided to children aged <15 years in the vicinity of an outbreak.
*** Routine program implemented in the 31 districts that have conducted campaigns.
††† Program commenced in high-risk districts in 1997 and reached approximately 80% of all districts in 2012.

immunization strategy is a one-time campaign in the locally defined target population (i.e., those age groups determined to be most at risk), followed by incorporation of JE vaccine into the routine childhood immunization program (*2*). Insufficient disease burden data, financial constraints, and competing vaccine priorities have prevented some countries from implementing programs. Several countries (e.g., India, Nepal, Sri Lanka, Thailand, and Vietnam) have initially targeted higher-risk areas and later expanded their programs. Countries with limited JE virus transmission risk might not have sufficient disease burden to require a JE vaccination program.

Three types of JE vaccine are used in national immunization programs. Inactivated mouse brain–derived JE vaccine has been available for >50 years, but has a multidose primary and booster schedule and is relatively expensive; its use has declined recently. Live attenuated SA14-14-2 vaccine has a simple schedule and good safety profile, and improved international availability has led to increased use in recent years. The vaccine's manufacturer, Chengdu Institute of Biological Products, has guaranteed a maximum public sector price for lower-income countries, comparable to the international public sector price for measles vaccine (*9*). Several inactivated Vero cell culture-derived vaccines also have become available and are being used in national programs. Despite the availability of pediatric clinical trial data and extensive post-licensure experience for several vaccines, until recently, no JE vaccine manufacturer had made a submission to WHO for prequalification of a JE vaccine, a process that reviews a vaccine's quality, safety, efficacy, and programmatic suitability. However, at least one JE vaccine is currently under review for pediatric use. WHO prequalification will enable procurement by United Nations agencies. The GAVI Alliance also has indicated it will consider funding JE vaccination when a WHO-prequalified vaccine for children is available (*10*).

The findings in this report are subject to at least one limitation. Data for this report were collected from publicly available sources with varying levels of detail and might not reflect the most current information.

Immunization is the most effective JE prevention strategy and has been shown in studies in several countries to be cost-effective (*8*). Recently, the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region endorsed development of an accelerated control goal for JE. Despite progress with surveillance and immunization, challenges remain. Measures to improve awareness of JE disease burden, technical and financial support from international agencies and donors, and sustained national commitment are required to support progress toward improved JE control.

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Polio Field Census and Vaccination of Underserved Populations — Northern Nigeria, 2012–2013

In 2012, the World Health Assembly declared completion of polio eradication a public health emergency (*1,2*). However, wild poliovirus (WPV) transmission remains endemic in three countries (Afghanistan, Nigeria, and Pakistan) (*2–4*). In Nigeria, the National Stop Transmission of Polio (N-STOP) program, under the umbrella of the Nigerian Field Epidemiology and Laboratory Training Program (FELTP), has been developed to implement innovative strategies that address the remaining polio eradication challenges in Nigeria. One N-STOP initiative focuses on locating and vaccinating children aged <5 years in remote nomadic, scattered, and border populations in northern Nigeria, where low polio vaccination coverage likely contributes to ongoing WPV transmission. During August 2012–April 2013, N-STOP conducted field outreach activities that enumerated 40,212 remote settlements, including 4,613 (11.5%) settlements never visited by vaccination teams during previous polio supplemental immunization activities (SIAs). Enumeration resulted in documentation of 906,201 children aged <5 years residing in these settlements, including 53,738 (5.9%) who had never received polio vaccination, and in detection of 211 unreported cases of acute flaccid paralysis (AFP) with onset of illness in the 6 months before enumeration. Sustaining access to underserved populations in remote settlements in future SIAs will increase overall population immunity and should decrease WPV transmission. By providing a flexible and capable workforce consisting of Nigerian citizens, N-STOP is able to support evaluation and implementation of innovative polio eradication strategies in Nigeria while building local public health capacity with a potential to address other public health problems following the eradication of polio from Nigeria.

The N-STOP Program

Nigeria's N-STOP program is modeled after the global Stop Transmission of Polio (STOP) program established in 1998 to support the Global Polio Eradication Initiative (*5,6*). Similar to the STOP program, but operated entirely by Nigerian citizens, N-STOP provides technical assistance in strengthening AFP surveillance; planning, implementation, and monitoring of SIAs; operational research; outbreak investigations; and strengthening of routine infant immunization services under the direction of the Nigeria Polio Emergency Operations Center (EOC). N-STOP is a collaboration of the Nigerian FELTP, the Nigerian National Primary Health Care Development Agency, CDC, the World Health Organization Country Office in Nigeria, the United Nations Children's Fund, and the U.S. Agency for International Development. FELTP is a 2-year fellowship in applied epidemiology and public health that deploys approximately 40 citizens per year to field assignments in locations throughout Nigeria. As of June 30, 2013, a total of 251 N-STOP officers and 1,782 ad hoc field workers had been trained to support polio eradication and routine immunization activities in local government areas in 17 states identified by the Nigeria EOC as having the highest risk for WPV transmission.

Outreach to Underserved Communities

Administering polio vaccine to every child is the central aim of the Global Polio Eradication Initiative. However, in a study conducted in Borno State in 2005 among Fulani (the dominant nomadic tribe in northern Nigeria) settlements, 99% of children surveyed had not received polio vaccine or other vaccines in the routine childhood vaccination schedule (WHO State Office, Borno State, Nigeria, unpublished data, 2005). One of the major barriers to reaching the Fulani and other underserved communities in northern Nigeria with polio vaccine and other health services is logistic. These communities reside in sparsely populated parts of Nigeria with no road access. In addition, the nomadic herders follow a seasonal pattern of movement with their cattle, with the result that many of the settlements are temporary. Such movements also increase the possibility that WPV will be spread. WPV transmission among Fulani nomads from polio-affected areas to previously polio-free settlements was documented in Niger State during an outbreak investigation in April 2012, and sporadic WPV cases were reported in local government areas along traditional nomadic routes in northern Nigeria (WHO Country Office, Nigeria, unpublished data, 2012). Moreover, children residing in remote nomadic, scattered, and border settlements lack access to routine infant immunization services (Nigerian National Primary Health Care Development Agency, CDC, NFELTP, unpublished data, 2013). These findings indicate that inclusion of these underserved communities in SIA plans and reaching these communities in each SIA are critical to interrupting WPV transmission in Nigeria.

In July 2012, N-STOP piloted a strategy to improve access to underserved communities using a combination of social engagement meetings with community leaders and a field census conducted before implementation of SIAs. N-STOP officers worked closely with local polio immunization staff members to incorporate all newly discovered settlements into plans for upcoming SIAs. In collaboration with national authorities and WHO, this strategy was scaled up during and after SIAs conducted in August 2012. During the meetings with community leaders, settlement lists used for polio SIA planning by the local health office are compared and harmonized with lists of settlements provided by community leaders. Focal points and guides from within the community are recruited to facilitate community acceptance and access to underserved communities. The field census exercise includes using smart phones enabled with global positioning systems to record the settlements included in the harmonized settlement list, conducting a census of children aged <5 years, actively searching for additional settlements, administering polio vaccine, and searching for children with onset of AFP in the 6 months before the field census.

At the end of the field census, a final list of settlements is shared with local and state public health officials so that newly detected settlements can be incorporated into plans for subsequent SIAs. Relationships with community leaders are maintained to ensure community engagement in future vaccination activities. This phase of the field outreach involved identifying chronically missed settlements, administering OPV when feasible, finding missed AFP cases, and strengthening community engagement with the health system on a sustainable basis. Additional phases of the project will include an evaluation of the consistency of future campaigns reaching these settlements and ensuring the inclusion of these underserved settlements in future SIAs.

During August 2012–April 2013, N-STOP supported a field census of underserved populations in 209 local government areas across 17 states with high risk for polio in northern and central Nigeria. During the field census, 40,212 settlements were enumerated, including 4,631 (11.5%) settlements that had never been visited during an SIA (Table) and 7,637 (19.0%) that had not been visited during the preceding SIA. Among the 906,201 children aged <5 years residing in the underserved settlements enumerated, 89,609 (9.9%) resided in settlements that had never been visited during an SIA. Overall, 53,738 (5.9%) of the 906,201 children enumerated had never received polio vaccine (Table). A total of 211 undocumented AFP cases were identified.

Reported by

Saheed O. Gidado, MBBS, Patrick M. Nguku, MBChB, Chima J. Ohuabunwo, MD, Ndadilnasiya E. Waziri, DVM, African Field Epidemiology Network. Andrew Etsano, MBBS, Mustapha Z. Mahmud, MBBS, Nigerian National Primary Health Care Development Agency. Faisal M. Shuaib, MBBS, Federal Ministry of Health, Nigeria. Charles K. Korir, MPH, Pascal Mkanda, MD, World Health Organization Country Office, Nigeria. Peter B. Bloland, DVM, Lisa E. Esapa, MPH, Brian C. Kaplan, MA, Frank J. Mahoney, MD, Eric E. Mast, MD, Adamma C. N. Mba-Jonas, MD, Ikechukwu U. Ogbuanu, PhD, Alicia G. Ruiz, Steve G. Wassilak, MD, Eric S. Wiesen, MPH, Global Immunization Div, Center for Global Health, CDC. ***Corresponding contributor:*** *Adamma C.N. Mba-Jonas, Adamma.mba-jonas@fda.hhs.gov, 301-827-6063; Ikechukwu U. Ogbuanu, iogbuanu@cdc.gov, 770-330-5829.*

Editorial Note

The findings described in this report demonstrate that many remote nomadic, scattered, and border settlements have been missed by polio vaccination teams during SIAs in northern Nigeria, including a substantial number of settlements that have never been accessed. These settlements are home to thousands of children aged <5 years who are susceptible to WPV infection. By bringing these settlements to the attention of local health officials, the children are often vaccinated during the field census and also can be included in the local plans for future SIAs. Although outreach to these settlements is often logistically difficult because of terrain, security, and distance

TABLE. Number of settlements and children aged <5 years enumerated and number of children identified with no previous polio vaccination, by census period— northern Nigeria, August 2012–April 2013

	Settlements			Children aged <5 yrs				
Census period	No. enumerated	No. not visited previously	(%)	Estimated total population in enumerated LGAs	No. enumerated	(%*)	No. identified with no polio vaccination	(%†)
August 2012	10,329	1,578	(15.3)	1,803,199	223,663	(12.4)	7,839	(3.5)
Oct–Nov 2012	9,575	848	(8.9)	1,222,161	205,100	(16.8)	14,123	(6.9)
December 2012	5,145	232	(4.5)	963,305	173,166	(18)	9,360	(5.4)
February 2013	5,072	662	(13.1)	1,403,260	103,573	(7.4)	6,304	(6.1)
March 2013	5,833	844	(14.5)	1,376,508	101,633	(7.3)	9,615	(9.5)
April 2013	4,258	467	(11.0)	1,295,475	99,066	(7.6)	6,497	(6.6)
Total	**40,212**	**4,631**	**(11.5)**	**8,063,878**	**906,201**	**(11.0)**	**53,738**	**(5.9)**

Abbreviation: LGAs = local government areas.
* Percentage of estimated total population of children aged <5 years in enumerated LGAs.
† Percentage of the number of children aged <5 years enumerated.

from centrally located health facilities, the successful penetration by N-STOP teams shows that remote settlements can be reached. The 211 undocumented AFP cases detected during the field census exercises further validate the importance of this outreach strategy. Planning is under way to enhance AFP surveillance in underserved communities. The community engagement strategy and operational procedures used during this field census have been incorporated into the national polio eradication guidelines for the vaccination of children residing in hard-to-reach settlements, which is a key priority of the 2013 National Polio Eradication Emergency Plan for Nigeria.

In addition to outreach to underserved communities, N-STOP provides operational research capabilities to address evolving polio eradication challenges. For example, N-STOP officers recently supported studies to evaluate 1) why some families refuse polio vaccination, 2) why some children are missed during SIAs, and 3) whether a new polio vaccination team-training package is effective and has gained acceptance. N-STOP officers also have played important roles in enhancing routine infant immunization services by serving as focal points dedicated to improving immunization capacity and in investigations of outbreaks of polio and measles by focusing on assessments of underserved communities.

The findings in this report are subject to at least two limitations. First, comprehensive assessment of the field census was limited by the difficulty of estimating the total population of children aged <5 years within the settlements enumerated, which further prevented a complete count of those children who have never been administered polio vaccine. Thus, the proportion of children aged <5 years with no history of polio vaccination relative to the total number of vaccine-eligible children within each settlement cannot be calculated with certainty. Second, the scattered nature of these settlements prevents conclusive completeness of the field census. Even with active searches for settlements by N-STOP teams that included enumerators and local guides, isolated settlements might have been missed. Use of satellite imagery to attempt to locate all possible settlements before conducting a field census is being considered.

N-STOP represents a successful partnership between FELTP, international health organizations, and the public health community in Nigeria. Through the program, public health capabilities in Nigeria have been greatly enhanced. N-STOP will continue to respond to emerging issues related to the Nigeria polio eradication program. In addition, N-STOP will continue to provide field work and leadership opportunities for public health professionals. After polio is eradicated, N-STOP can serve as both a model and an important source of public health leadership in Nigeria.

What is already known on this topic?

Polio eradication is a global public health priority, and Nigeria is one of three countries where endemic polio virus transmission has yet to be interrupted. Interruption has been impeded by omission of residents within nomadic, scattered, border, and otherwise hard-to-reach settlements from vaccination campaigns. Undervaccination of children in these settlements might be creating a reservoir of susceptible persons in a country where wild poliovirus transmission is ongoing.

What is added by this report?

During August 2012–April 2013, the Nigerian National Stop Transmission of Polio (N-STOP) program conducted field exercises to locate and characterize hard-to-reach and nomadic settlements that might be chronically omitted from polio vaccination campaigns and harbor unvaccinated or undervaccinated children aged <5 years. Through these field exercises, 40,212 remote settlements, including 4,613 (11.5%) never before visited by polio vaccination teams, were enumerated. Of the 906,201 children aged <5 years who resided in these settlements, 53,738 (5.9%) had never received polio vaccine. The outreach effort also resulted in the detection of 211 unreported cases of acute flaccid paralysis with onset of illness in the preceding 6 months.

What are the implications for public health practice?

By facilitating the vaccination of previously unimmunized children in hard-to-reach settlements, NSTOP is helping to close the polio immunity gap in northern Nigeria. Closing the immunity gap in chronically missed populations is vital to polio eradication in Nigeria. The field exercise conducted by N-STOP provides a standardized strategy to find and vaccinate children who have been repeatedly missed by previous campaigns. N-STOP officers can rapidly and effectively implement censuses and other programs, and N-STOP represents a substantial enhancement of public health capabilities in Nigeria.

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Investigational Drug Available Directly from CDC for the Treatment of Infections with Free-Living Amebae

Infections caused by free-living amebae (FLA) are severe and life-threatening. These infections include primary amebic meningoencephalitis (PAM) caused by *Naegleria fowleri** and granulomatous amebic encephalitis caused by *Balamuthia mandrillaris*† and *Acanthamoeba* species.§ Although several drugs have in vitro activity against FLA, mortality from these infections remains >90% despite treatment with combinations of drugs.

Miltefosine is a drug used to treat leishmaniasis and also has shown in vitro activity against FLA (*1*), but as an investigational drug, it has not been readily available in the United States. With CDC assistance, however, miltefosine has been administered since 2009 for FLA infections as single-patient emergency use with permission from the Food and Drug Administration. Although the number of *B. mandrillaris* and *Acanthamoeba* species infections treated with a miltefosine-containing regimen is small, it appears that a miltefosine-containing treatment regimen does offer a survival advantage for patients with these often fatal infections (*2*). Miltefosine has not been used successfully to treat a *Naegleria* infection, but the length of time it has taken to import miltefosine from abroad has made timely treatment of fulminant *Naegleria* infections difficult.

CDC now has an expanded access investigational new drug (IND) protocol in effect with the Food and Drug Administration to make miltefosine available directly from CDC for treatment of FLA in the United States. The expanded access IND use of miltefosine for treatment of FLA is partly supported by 26 case reports of FLA infection in which miltefosine was part of the treatment regimen (Division of Foodborne, Waterborne, and Environmental Diseases, National Center for Emerging and Zoonotic Infectious Diseases, CDC, unpublished data, 2013). Miltefosine generally is well-tolerated, with gastrointestinal symptoms the most commonly reported adverse effects. Clinicians who suspect they have a patient with FLA infection who could benefit from treatment with miltefosine should contact CDC to consult with an FLA expert. For diagnostic assistance, specimen collection guidance, specimen shipping instructions, and treatment recommendations, clinicians should contact the CDC Emergency Operations Center at 770-488-7100.

* Additional information available at http://www.cdc.gov/parasites/naegleria.
† Additional information available at http:// www.cdc.gov/parasites/balamuthia.
§ Additional information available at http://www.cdc.gov/parasites/acanthamoeba.

Reported by

Corresponding contributor: *Jennifer R. Cope, Div of Foodborne, Waterborne, and Environmental Diseases, National Center for Emerging and Zoonotic Infectious Diseases, CDC, jcope@cdc.gov, 404-718-4878.*

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Notes from the Field

Eye Injuries Sustained at a Foam Party — Collier County, Florida 2012

On May 26, 2012, the Collier County Health Department was notified by law enforcement and hospital personnel that approximately 40 persons had sought care at local emergency departments because of severe eye irritation and pain. Patients reported that they had attended a foam party at a local nightclub the night before. Syndromic surveillance activities carried out by the Florida Department of Health identified 35 patients who had visited an emergency department in Collier County on May 26 with a chief complaint related to eye injuries, well above the expected number of less than 10.

At foam parties, soapy foam is sprayed onto the dance floor while participants dance. The foam is distributed from blowers on the ground or attached to the ceiling, and several feet of foam can accumulate. Foam parties can last for several hours while foam is dispersed intermittently throughout the night. Products used at these events to produce foam contain ingredients similar to those in soaps and shampoos, such as sodium lauryl sulfate. Some formulations used at foam parties are proprietary, and chemicals, chemical compositions, and concentrations are unknown. For use at a foam party, the product is purchased in a highly concentrated form and diluted with water before use. This was the third foam party of the year at this nightclub.

An investigation was initiated by the Florida Department of Health to determine the extent and severity of the injuries. A case was defined as an eye injury (self-reported or identified using specific codes in the *International Classification of Diseases, Ninth Revision* [ICD-9] during medical record abstraction) in a person who had attended a specific local nightclub foam party in Naples, Florida, from the evening of May 25 through the morning of May 26, 2012. Efforts to identify cases involved abstraction of medical records from patients treated in emergency departments at the two major hospital systems in Collier County. Records were requested for any person who presented with symptoms of eye irritation or chemical burns during May 25–June 1, 2012. Medical records also were requested, using specific ICD-9 codes, from ophthalmology clinics, urgent-care centers, and the neighboring county hospital system where patients were known to have sought care. Using contact information obtained from medical records, patients were contacted and interviewed over the telephone. An incident-specific questionnaire was developed to obtain information on demographics, foam party attendance, foam exposures, potential risk factors, symptoms and injuries, medical care received, and previous foam party experiences. Additional attendees were identified by asking interviewees if they had attended the party with another person, and if so, were they willing to provide the contact information for them.

Medical record abstractions in Collier County hospitals identified 30 cases of injury related to the foam party. Interviews, contacts provided by local law offices, and additional medical record abstractions from ophthalmology clinics, urgent-care centers, and neighboring county hospitals led to the identification of an additional 26 cases. A total of 56 persons meeting the case definition were identified during the investigation out of approximately 350 persons thought to have attended the party. Thus, an estimated 16% of attendees suffered eye injuries as a result of this event, and 43 (76.8%) of them received medical care.

In all cases, injured persons reported getting foam in their face, with 96% (n = 44) of interviewed persons reporting eye exposure. Almost 90% of interviewed persons reported rubbing their eyes after exposure to the foam. Eye irritation (94.6%), severe eye pain (91.1%), pink eye/redness (87.5%), decreased visual acuity (81.3%), and conjunctivitis (76.8%) were the most common injuries (Table). Of note, half of the cases were diagnosed with abrasions of the cornea (n = 28). For those persons who sought medical care, the average number of visits

TABLE. Number and percentage of persons with injuries and symptoms resulting from a foam party at a nightclub — Collier County, Florida, May 2012

Characteristic	No.	(%)
Received medical care		
No	13	(23.2)
Yes	43	(76.8)
Eye injuries	**56**	**(100.0)**
Eye irritation	53	(94.6)
Severe eye pain	51	(91.1)
Pink eye/Redness	49	(87.5)
Decreased visual acuity†	39	(81.3)
Conjunctivitis	43	(76.8)
Photophobia	40	(71.4)
Drainage	32	(57.1)
Abnormal pH	28	(50.0)
Corneal abrasions	28	(50.0)
Tearing§	17	(40.5)
Blurry vision§	16	(38.1)
Watery discharge§	9	(21.4)
Foreign body sensation	2	(3.6)
Non–eye-related injuries	**18**	**(32.1)**
Skin irritation/Rash	14	(25.0)
Slips/Falls	3	(5.4)
Allergic reaction	2	(3.6)

* N = 56.
† Because of missing information for eight cases, n = 48.
§ Medical record only (n = 42).

was 3.2. In 11 cases, patient's visual acuity could not be tested in at least one eye during their initial medical-care visit because they were unable to open their eye or read the first letter of the chart. Among persons interviewed, the average duration of symptoms was 7 days (median: 6 days), ranging from less than 1 hour to more than 1 month. In seven cases, symptoms had not completely resolved at the time of the interview (i.e., more than 1 month after the injury).

Although some persons experienced minor eye irritations related to foam exposure, many experienced more serious eye injuries, such as decreased visual acuity (n = 39), conjunctivitis (n = 43), and corneal abrasions (n = 28). This investigation highlights the range and potential seriousness of eye injuries that can result from exposure to foam.

Reported by

Philip P. Cavicchia, PhD, Sharon Watkins, PhD, Carina Blackmore, DVM, Florida Dept of Health. James Matthias, MPH, CDC/Council of State and Territorial Epidemiologists Applied Epidemiology Fellow. ***Corresponding contributor:*** *Philip P. Cavicchia, philip_cavicchia@doh.state.fl.us, 850-245-4444 (ext. 3873).*

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Joan Colfer, MD, Muhammad Abbasi, MD, Ken Rech, Terri Harder, Deb Millsap, MEd, Collier County Health Dept, Naples, Florida.

Notice to Readers

Final 2012 Reports of Nationally Notifiable Infectious Diseases

The tables listed in this report on pages 970–982 summarize finalized data, as of June 30, 2013, from the National Notifiable Diseases Surveillance System (NNDSS) for 2012. These data will be published in more detail in the *Summary of Notifiable Diseases — United States, 2012* (*1*). Because no cases were reported in the United States during 2012, the following diseases do not appear in these early release tables: anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome–associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and nonneuroinvasive; yellow fever; and viral hemorrhagic fevers.

Policies for reporting NNDSS data to CDC can vary by disease or reporting jurisdiction depending on case status classification (i.e., confirmed, probable, or suspected). The publication criteria used for the 2012 finalized tables are listed in the "Print Criteria" column of the NNDSS event code list, available at http://wwwn.cdc.gov/nndss/document/nndss_event_code_list_2012.pdf. In addition, only cases from reporting jurisdictions where the nationally notifiable disease is reportable are published. The NNDSS website is updated annually to include the latest national surveillance case definitions approved by the Council of State and Territorial Epidemiologists for classifying and enumerating cases of nationally notifiable infectious diseases.

Population estimates are from the National Center for Health Statistics postcensal estimates of the resident population of the United States for July 1, 2011–July 1, 2012, by year, county, single-year of age (0 to ≥85 years), bridged-race, (white, black or African American, American Indian or Alaska Native, Asian or Pacific Islander), Hispanic origin (not Hispanic or Latino, Hispanic or Latino), and sex (vintage 2011), prepared under a collaborative arrangement with the U.S. Census Bureau. Population estimates for states are available at http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011 as of June 13, 2013. Population estimates for territories are 2012 estimates from the U.S. Census Bureau (*2*).

References

1. CDC. Summary of notifiable diseases, United States, 2012. MMWR 2012;61(53). In press.
2. US Census Bureau. International data base. Washington, DC: US Census Bureau; 2012. Available at http://www.census.gov/population/international/data/idb/informationGateway.php.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Total Resident Population (in thousands)	Arboviral diseases†							
		California serogroup viruses		Eastern equine encephalitis virus	Powassan virus	St. Louis encephalitis virus		West Nile virus	
		Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	311,589	73	8	15	7	1	2	2,872	2,801
New England	14,519	—	—	9	—	—	—	42	21
Connecticut	3,587	—	—	—	—	—	—	12	9
Maine	1,329	—	—	—	—	—	—	1	—
Massachusetts	6,607	—	—	7	—	—	—	25	8
New Hampshire	1,318	—	—	—	—	—	—	1	—
Rhode Island	1,051	—	—	—	—	—	—	2	2
Vermont	627	—	—	2	—	—	—	1	2
Mid. Atlantic	41,081	1	—	—	1	—	—	116	99
New Jersey	8,835	—	—	—	—	—	—	22	26
New York (Upstate)	11,232	1	—	—	1	—	—	35	31
New York City	8,270	—	—	—	—	—	—	26	15
Pennsylvania	12,744	—	—	—	—	—	—	33	27
E.N. Central	46,504	16	3	—	2	—	—	494	253
Illinois	12,860	—	—	—	—	—	—	187	103
Indiana	6,516	2	1	—	—	—	—	46	31
Michigan	9,877	—	—	—	—	—	—	141	61
Ohio	11,541	12	1	—	—	—	—	76	45
Wisconsin	5,710	2	1	—	2	—	—	44	13
W.N. Central	20,641	4	—	—	4	—	—	225	437
Iowa	3,064	—	—	—	—	—	—	11	20
Kansas	2,870	—	—	—	—	—	—	20	36
Minnesota	5,347	4	—	—	4	—	—	34	36
Missouri	6,009	—	—	—	—	—	—	17	3
Nebraska	1,842	—	—	—	—	—	—	42	151
North Dakota	685	—	—	—	—	—	—	39	50
South Dakota	824	—	—	—	—	—	—	62	141
S. Atlantic	60,544	39	5	6	—	—	—	185	129
Delaware	908	—	—	—	—	—	—	2	7
District of Columbia	619	—	—	—	—	—	—	8	2
Florida	19,082	—	—	2	—	—	—	52	21
Georgia	9,812	—	—	1	—	—	—	46	53
Maryland	5,840	—	—	—	—	—	—	25	22
North Carolina	9,651	26	—	2	—	—	—	7	—
South Carolina	4,673	2	—	—	—	—	—	20	9
Virginia	8,104	2	—	1	—	—	—	20	10
West Virginia	1,855	9	5	—	—	—	—	5	5
E.S. Central	18,548	10	—	—	—	—	—	173	192
Alabama	4,804	—	—	—	—	—	—	38	24
Kentucky	4,367	—	—	—	—	—	—	13	10
Mississippi	2,977	1	—	—	—	—	—	103	144
Tennessee	6,400	9	—	—	—	—	—	19	14
W.S. Central	36,930	3	—	—	—	1	2	1,146	1,312
Arkansas	2,939	—	—	—	—	—	—	44	20
Louisiana	4,575	—	—	—	—	—	—	155	180
Oklahoma	3,784	—	—	—	—	—	—	103	88
Texas	25,632	3	—	—	—	1	2	844	1,024
Mountain	22,345	—	—	—	—	—	—	190	165
Arizona	6,467	—	—	—	—	—	—	87	46
Colorado	5,116	—	—	—	—	—	—	62	69
Idaho	1,584	—	—	—	—	—	—	5	12
Montana	998	—	—	—	—	—	—	1	5
Nevada	2,720	—	—	—	—	—	—	5	4
New Mexico	2,079	—	—	—	—	—	—	24	23
Utah	2,814	—	—	—	—	—	—	3	2
Wyoming	567	—	—	—	—	—	—	3	4
Pacific	50,477	—	—	—	—	—	—	301	193
Alaska	724	—	—	—	—	—	—	—	—
California	37,684	—	—	—	—	—	—	297	182
Hawaii	1,378	—	—	—	—	—	—	—	—
Oregon	3,868	—	—	—	—	—	—	—	11
Washington	6,823	—	—	—	—	—	—	4	—
Territories									
American Samoa	55	—	—	—	—	—	—	—	—
C.N.M.I.	52	—	—	—	—	—	—	—	—
Guam	160	—	—	—	—	—	—	—	—
Puerto Rico	3,707	—	—	—	—	—	—	1	—
U.S. Virgin Islands	106	—	—	—	—	—	—	—	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of Vector-Borne Infectious Diseases (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

	Babesiosis			Botulism					
Area	Total	Confirmed	Probable	Total	Foodborne	Infant	Other†	Brucellosis	Chancroid§
United States	940	717	223	168	27	123	18	114	15
New England	471	418	53	2	—	2	—	—	1
Connecticut	123	106	17	1	—	1	—	—	—
Maine	10	8	2	—	—	—	—	—	—
Massachusetts	261	237	24	1	—	1	—	—	1
New Hampshire	19	18	1	—	—	—	—	—	—
Rhode Island	56	47	9	—	—	—	—	—	—
Vermont	2	2	—	—	—	—	—	—	—
Mid. Atlantic	346	224	122	37	2	34	1	4	—
New Jersey	92	75	17	7	1	6	—	—	—
New York (Upstate)	226	130	96	5	—	4	1	—	—
New York City	28	19	9	4	1	3	—	3	—
Pennsylvania	N	N	N	21	—	21	—	1	—
E.N. Central	72	55	17	11	4	7	—	10	3
Illinois	2	1	1	1	—	1	—	5	—
Indiana	1	—	1	—	—	—	—	3	1
Michigan	—	—	—	4	2	2	—	1	2
Ohio	N	N	N	6	2	4	—	—	—
Wisconsin	69	54	15	—	—	—	—	1	—
W.N. Central	41	14	27	2	—	1	1	2	—
Iowa	N	N	N	—	—	—	—	—	—
Kansas	N	N	N	1	—	—	1	1	—
Minnesota	40	13	27	—	—	—	—	—	—
Missouri	N	N	N	1	—	1	—	1	—
Nebraska	1	1	—	—	—	—	—	—	—
North Dakota	—	—	—	—	—	—	—	—	—
South Dakota	N	N	N	—	—	—	—	—	—
S. Atlantic	6	2	4	10	1	8	1	28	3
Delaware	—	—	—	1	1	—	—	—	—
District of Columbia	3	1	2	1	—	1	—	—	—
Florida	N	N	N	1	—	1	—	17	—
Georgia	N	N	N	1	—	1	—	4	—
Maryland	3	1	2	2	—	2	—	1	1
North Carolina	N	N	N	1	—	1	—	5	1
South Carolina	N	N	N	1	—	—	1	—	—
Virginia	N	N	N	2	—	2	—	—	1
West Virginia	N	N	N	—	—	—	—	1	—
E.S. Central	—	—	—	7	—	7	—	2	1
Alabama	—	—	—	—	—	—	—	—	1
Kentucky	N	N	N	4	—	4	—	1	—
Mississippi	N	N	N	2	—	2	—	—	—
Tennessee	—	—	—	1	—	1	—	1	—
W.S. Central	—	—	—	4	—	3	1	22	—
Arkansas	N	N	N	1	—	1	—	2	—
Louisiana	N	N	N	—	—	—	—	2	—
Oklahoma	N	N	N	1	—	1	—	—	—
Texas	N	N	N	2	—	1	1	18	—
Mountain	—	—	—	30	12	18	—	9	—
Arizona	N	N	N	14	12	2	—	5	—
Colorado	N	N	N	1	—	1	—	2	—
Idaho	N	N	N	2	—	2	—	—	—
Montana	—	—	—	—	—	—	—	—	—
Nevada	N	N	N	—	—	—	—	—	—
New Mexico	N	N	N	2	—	2	—	—	—
Utah	N	N	N	9	—	9	—	2	—
Wyoming	—	—	—	2	—	2	—	—	—
Pacific	4	4	—	65	8	43	14	37	7
Alaska	N	N	N	3	3	—	—	1	—
California	4	4	—	52	3	36	13	34	7
Hawaii	N	N	N	—	—	—	—	2	—
Oregon	—	—	—	4	1	3	—	—	—
Washington	—	—	—	6	1	4	1	—	—
Territories									
American Samoa	U	U	U	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—
Puerto Rico	N	N	N	N	N	N	N	—	—
U.S. Virgin Islands	N	N	N	—	—	—	—	—	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.
* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.
† Includes cases reported as wound and unspecified botulism.
§ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 29, 2013.

Please note: Errata have been published for this issue. To view the errata, please click here and here.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	*Chlamydia trachomatis* infection†	Cholera	Coccidioidomycosis	Cryptosporidiosis Total	Cryptosporidiosis Confirmed	Cryptosporidiosis Probable	Cyclosporiasis
United States	1,422,976	17	17,802	7,956	5,098	2,718	123
New England	49,137	1	3	391	333	58	7
Connecticut	13,065	—	N	41	41	—	6
Maine	3,413	—	N	58	32	26	N
Massachusetts	23,550	1	—	155	155	—	1
New Hampshire	3,072	—	2	54	22	32	—
Rhode Island	4,313	—	1	16	16	—	—
Vermont	1,724	—	N	67	67	—	N
Mid. Atlantic	182,810	6	4	809	669	140	28
New Jersey	27,271	—	N	42	41	1	7
New York (Upstate)	38,227	—	N	229	220	9	5
New York City	62,319	4	N	124	121	3	16
Pennsylvania	54,993	2	4	414	287	127	N
E.N. Central	221,639	—	51	1,863	1,154	709	2
Illinois	67,701	—	N	173	73	100	2
Indiana	29,505	—	N	164	127	37	—
Michigan	47,566	—	27	351	285	66	—
Ohio	53,141	—	22	569	64	505	—
Wisconsin	23,726	—	2	606	605	1	—
W.N. Central	81,983	—	151	1,349	626	723	2
Iowa	11,377	—	N	328	78	250	—
Kansas	11,135	—	N	122	65	57	—
Minnesota	18,056	—	119	347	213	134	—
Missouri	27,835	—	17	239	109	130	2
Nebraska	6,748	—	1	165	127	38	—
North Dakota	2,908	—	14	35	3	32	N
South Dakota	3,924	—	N	113	31	82	—
S. Atlantic	285,340	9	9	1,142	686	456	34
Delaware	4,438	—	1	15	7	8	—
District of Columbia	6,808	—	1	N	N	N	N
Florida	77,644	7	N	470	243	227	25
Georgia	52,418	—	N	257	257	—	2
Maryland	26,534	2	7	86	30	56	4
North Carolina	50,596	—	N	86	28	58	2
South Carolina	27,149	—	N	72	36	36	—
Virginia	34,963	—	N	144	81	63	1
West Virginia	4,790	—	N	12	4	8	—
E.S. Central	103,473	—	—	284	148	136	2
Alabama	30,621	—	N	109	19	90	N
Kentucky	17,273	—	N	63	50	13	N
Mississippi	23,054	—	N	40	40	—	N
Tennessee	32,525	—	N	72	39	33	2
W.S. Central	187,843	1	4	596	482	114	45
Arkansas	16,611	—	N	42	41	1	—
Louisiana	27,353	—	4	155	155	—	1
Oklahoma	16,843	—	N	97	14	83	—
Texas	127,036	1	N	302	272	30	44
Mountain	93,204	—	13,140	830	676	154	1
Arizona	30,444	—	12,920	47	35	12	—
Colorado	21,631	—	N	102	63	39	1
Idaho	4,550	—	N	267	182	85	N
Montana	3,827	—	3	69	69	—	N
Nevada	11,137	—	118	15	9	6	N
New Mexico	11,898	—	37	94	91	3	—
Utah	7,615	—	56	202	196	6	—
Wyoming	2,102	—	6	34	31	3	—
Pacific	217,547	—	4,440	692	324	228	2
Alaska	5,462	—	N	7	7	—	N
California	167,695	—	4,431	365	216	9	1
Hawaii	6,340	—	N	5	5	—	—
Oregon	13,454	—	2	214	16	198	1
Washington	24,596	—	7	101	80	21	—
Territories	—	—	N	N	N	N	N
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	1,031	—	—	—	—	—	—
Guam	6,227	—	N	N	N	N	N
Puerto Rico	802	—	—	—	—	—	—
U.S. Virgin Islands	802	—	—	—	—	—	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of STD Prevention, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Dengue Virus Infection†		Diphtheria	Ehrlichiosis/Anaplasmosis			
	Dengue Fever	Dengue Hemorrhagic Fever		*Anaplasma phagocytophilum*	*Ehrlichia chaffeensis*	*Ehrlichia ewingii*	Undetermined
United States	544	3	1	2,389	1,128	17	191
New England	17	—	—	659	52	—	—
Connecticut	16	—	—	142	—	—	—
Maine	—	—	—	52	3	—	—
Massachusetts	—	—	—	318	25	—	—
New Hampshire	—	—	—	52	3	—	—
Rhode Island	—	—	—	86	21	—	—
Vermont	1	—	—	9	—	—	—
Mid. Atlantic	132	—	1	482	123	—	31
New Jersey	—	—	—	139	58	—	1
New York (Upstate)	16	—	1	315	48	—	13
New York City	95	—	—	20	11	—	—
Pennsylvania	21	—	—	8	6	—	17
E.N. Central	55	1	—	604	61	1	102
Illinois	20	1	—	12	36	1	1
Indiana	9	—	—	—	—	—	35
Michigan	9	—	—	6	2	—	—
Ohio	6	—	—	1	3	—	1
Wisconsin	11	—	—	585	20	—	65
W.N. Central	19	1	—	538	236	11	27
Iowa	2	—	—	N	N	N	N
Kansas	1	—	—	7	41	1	—
Minnesota	9	—	—	503	9	—	17
Missouri	5	1	—	23	186	10	9
Nebraska	—	—	—	2	—	—	—
North Dakota	—	—	—	3	—	—	—
South Dakota	2	—	—	—	—	—	1
S. Atlantic	185	—	—	56	334	2	11
Delaware	—	—	—	1	16	1	—
District of Columbia	—	—	—	N	N	N	N
Florida	139	—	—	5	23	—	—
Georgia	11	—	—	5	24	—	2
Maryland	9	—	—	5	37	—	—
North Carolina	7	—	—	21	109	—	2
South Carolina	2	—	—	—	2	—	—
Virginia	17	—	—	18	123	1	6
West Virginia	—	—	—	1	—	—	1
E.S. Central	12	—	—	26	102	3	11
Alabama	4	—	—	11	10	—	5
Kentucky	1	—	—	1	29	—	—
Mississippi	1	—	—	1	2	—	—
Tennessee	6	—	—	13	61	3	6
W.S. Central	23	—	—	24	220	—	1
Arkansas	—	—	—	8	85	—	—
Louisiana	6	—	—	—	1	—	1
Oklahoma	1	—	—	15	130	—	—
Texas	16	—	—	1	4	—	—
Mountain	13	—	—	—	—	—	2
Arizona	8	—	—	—	—	—	1
Colorado	—	—	—	N	N	N	N
Idaho	1	—	—	N	N	N	N
Montana	2	—	—	N	N	N	N
Nevada	2	—	—	—	—	—	—
New Mexico	—	—	—	N	N	N	N
Utah	—	—	—	—	—	—	1
Wyoming	—	—	—	—	—	—	—
Pacific	88	1	—	—	—	—	6
Alaska	1	—	—	N	N	N	N
California	64	—	—	—	—	—	6
Hawaii	8	—	—	N	N	N	N
Oregon	—	—	—	—	—	—	—
Washington	15	1	—	—	—	—	—
Territories							
American Samoa	—	—	—	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	N	N	N	N
Puerto Rico	5,907	118	—	N	N	N	N
U.S. Virgin Islands	141	1	—	—	—	—	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Total number of reported laboratory-positive dengue cases including all confirmed cases [by anti-dengue virus (DENV) molecular diagnostic methods or seroconversion of anti-DENV IgM] and all probable cases (by a single, positive anti-DENV IgM). Totals reported to the DVBD, NCEZID (ArboNET Surveillance), as of June 1, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Giardiasis	Gonorrhea†	*Haemophilus influenza*, invasive disease: All ages, serotypes	Age <5 years: Serotype b	Age <5 years: Nonserotype b	Age <5 years: Unknown serotype	Hansen disease (leprosy)
United States	15,178	334,826	3,418	30	205	210	82
New England	1,436	5,970	235	2	13	7	3
Connecticut	223	2,133	61	—	—	3	1
Maine	169	456	23	—	2	—	N
Massachusetts	698	2,628	111	2	10	—	1
New Hampshire	105	147	12	—	—	4	1
Rhode Island	58	507	19	—	—	—	—
Vermont	183	99	9	—	1	—	N
Mid. Atlantic	2,928	45,447	674	8	29	24	5
New Jersey	423	7,486	124	—	—	11	—
New York (Upstate)	975	7,884	201	4	9	3	N
New York City	872	14,687	123	—	—	7	4
Pennsylvania	658	15,390	226	4	20	3	1
E.N. Central	2,203	59,268	570	6	40	41	2
Illinois	347	18,149	159	1	11	13	—
Indiana	227	7,338	104	2	13	1	—
Michigan	547	12,584	82	—	—	16	2
Ohio	578	16,493	158	3	16	—	—
Wisconsin	504	4,704	67	—	—	11	—
W.N. Central	1,726	17,676	245	2	7	23	4
Iowa	251	2,006	—	—	—	—	—
Kansas	133	2,228	32	—	1	3	—
Minnesota	610	3,082	85	2	6	6	1
Missouri	330	7,889	82	—	—	8	3
Nebraska	194	1,429	31	—	—	3	—
North Dakota	64	335	15	—	—	3	N
South Dakota	144	707	—	—	—	—	—
S. Atlantic	2,438	73,447	818	3	30	55	12
Delaware	24	899	8	—	1	—	—
District of Columbia	77	2,402	3	—	—	1	—
Florida	1,095	19,462	229	—	—	24	10
Georgia	544	15,326	186	—	8	16	1
Maryland	239	5,686	87	1	7	—	—
North Carolina	N	14,318	99	—	—	11	1
South Carolina	128	7,638	72	1	4	3	—
Virginia	272	6,885	101	—	8	—	—
West Virginia	59	831	33	1	2	—	N
E.S. Central	178	29,526	220	1	16	3	2
Alabama	178	9,270	55	1	2	1	1
Kentucky	N	4,283	36	—	1	—	—
Mississippi	N	6,875	26	—	6	—	1
Tennessee	N	9,098	103	—	7	2	—
W.S. Central	332	50,094	207	—	16	11	14
Arkansas	108	4,307	30	—	1	3	1
Louisiana	224	8,873	57	—	—	8	3
Oklahoma	N	4,441	117	—	15	—	N
Texas	N	32,473	3	—	N	N	10
Mountain	1,199	13,576	307	5	47	7	3
Arizona	113	5,809	120	2	23	1	—
Colorado	356	2,822	58	—	4	—	—
Idaho	153	167	18	—	3	1	—
Montana	67	108	6	—	1	—	—
Nevada	91	2,264	21	—	1	1	2
New Mexico	95	1,883	46	1	8	1	—
Utah	287	479	33	2	6	3	1
Wyoming	37	44	5	—	1	—	—
Pacific	2,738	39,822	142	3	7	39	37
Alaska	96	726	15	—	—	5	—
California	1,715	33,579	32	—	—	30	13
Hawaii	34	815	22	—	—	4	24
Oregon	381	1,464	69	2	4	—	N
Washington	512	3,238	4	1	3	—	N
Territories							
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	2	92	—	—	—	—	10
Puerto Rico	24	345	—	—	—	—	—
U.S. Virgin Islands	—	136	N	N	N	N	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of STD Prevention, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Hantavirus Pulmonary Syndrome	Hemolytic uremic syndrome, postdiarrheal	Hepatitis, viral, acute			Hepatitis B Perinatal infection	HIV diagnoses†
			A	B	C		
United States	30	274	1,562	2,895	1,782	40	35,361
New England	—	10	83	105	85	—	935
Connecticut	N	2	23	15	34	—	277
Maine	—	2	9	9	8	—	38
Massachusetts	—	5	40	75	37	—	510
New Hampshire	—	—	6	4	N	—	44
Rhode Island	—	—	3	U	U	—	62
Vermont	—	1	2	2	6	—	4
Mid. Atlantic	2	16	233	246	230	12	5,616
New Jersey	—	3	60	70	71	2	990
New York (Upstate)	1	12	63	50	83	3	1,327
New York City	—	1	48	63	10	4	2,026
Pennsylvania	1	N	62	63	66	3	1,273
E.N. Central	1	42	235	457	245	4	3,771
Illinois	1	7	67	86	26	1	1,388
Indiana	—	12	11	90	110	—	472
Michigan	—	5	100	81	76	2	654
Ohio	—	10	36	178	7	1	1,013
Wisconsin	—	8	21	22	26	—	244
W.N. Central	2	52	89	99	62	2	1,161
Iowa	1	10	7	13	3	—	116
Kansas	—	7	15	9	16	—	147
Minnesota	—	13	29	17	32	1	308
Missouri	—	18	20	48	4	1	496
Nebraska	—	1	16	10	3	—	58
North Dakota	—	3	2	—	—	—	9
South Dakota	1	—	—	2	4	—	27
S. Atlantic	1	26	267	754	423	5	10,327
Delaware	—	—	9	11	—	1	136
District of Columbia	N	N	—	—	—	—	509
Florida	—	1	87	247	107	1	4,629
Georgia	—	7	46	109	82	1	1,236
Maryland	—	4	28	52	39	—	1,016
North Carolina	—	7	34	73	63	—	1,145
South Carolina	—	4	6	37	1	—	716
Virginia	—	3	49	84	76	2	871
West Virginia	1	—	8	141	55	—	69
E.S. Central	—	26	78	577	331	1	2,120
Alabama	N	7	19	79	24	—	545
Kentucky	—	N	25	180	178	1	312
Mississippi	N	1	11	78	U	N	441
Tennessee	—	18	23	240	129	—	822
W.S. Central	—	26	161	367	140	6	5,118
Arkansas	—	3	8	74	5	1	125
Louisiana	—	1	7	44	11	—	1,156
Oklahoma	—	9	12	79	80	1	253
Texas	—	13	134	170	44	4	3,584
Mountain	11	17	163	89	112	—	1,504
Arizona	1	2	93	14	U	—	590
Colorado	3	6	28	24	42	—	362
Idaho	—	3	11	5	11	—	24
Montana	3	1	6	2	9	—	20
Nevada	—	—	10	28	12	—	326
New Mexico	1	—	10	3	21	—	109
Utah	2	5	4	13	17	—	65
Wyoming	1	—	1	—	—	—	8
Pacific	13	59	253	201	154	10	4,809
Alaska	N	N	1	1	—	—	26
California	9	44	209	136	63	7	4,037
Hawaii	—	—	5	5	—	1	43
Oregon	2	15	9	25	37	—	205
Washington	2	—	29	34	54	2	498
Territories							
American Samoa	N	N	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	N	—	—	—	—	—	2
Puerto Rico	—	N	6	32	N	—	507
U.S. Virgin Islands	—	N	—	—	—	—	8

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* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2012.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Influenza-associated pediatric mortality†	Invasive Pneumococcal disease§		Legionellosis	Listeriosis	Lyme disease			Malaria
		All Ages	Age <5 years			Total	Confirmed	Probable	
United States	52	15,635	1,266	3,688	727	30,831	22,014	8,817	1,503
New England	1	1,199	77	308	60	11,095	7,455	3,640	104
Connecticut	—	309	17	55	22	2,657	1,653	1,004	21
Maine	1	102	3	18	5	1,111	885	226	5
Massachusetts	—	571	50	173	27	5,138	3,396	1,742	48
New Hampshire	—	80	6	19	3	1,450	1,002	448	9
Rhode Island	—	73	1	31	2	217	133	84	17
Vermont	—	64	—	12	1	522	386	136	4
Mid. Atlantic	6	2,290	130	975	166	11,607	8,922	2,685	386
New Jersey	3	596	39	173	44	3,576	2,732	844	67
New York (Upstate)	2	1,045	64	325	43	2,456	1,714	742	42
New York City	—	649	27	177	38	542	330	212	225
Pennsylvania	1	N	N	300	41	5,033	4,146	887	52
E.N. Central	7	2,894	228	847	102	2,209	1,765	444	145
Illinois	1	N	49	226	29	204	204	—	43
Indiana	1	728	37	54	10	74	64	10	22
Michigan	3	540	30	178	21	98	80	18	26
Ohio	—	1,149	86	288	28	67	49	18	41
Wisconsin	2	477	26	101	14	1,766	1,368	398	13
W.N. Central	2	846	92	171	30	1,735	1,032	703	101
Iowa	—	N	N	13	3	165	92	73	6
Kansas	—	N	N	16	7	19	9	10	7
Minnesota	1	499	31	51	7	1,515	911	604	58
Missouri	1	N	36	68	8	2	1	1	19
Nebraska	—	143	14	11	5	15	5	10	4
North Dakota	—	108	—	3	—	15	10	5	2
South Dakota	—	96	11	9	—	4	4	—	5
S. Atlantic	8	3,210	277	613	116	3,842	2,667	1,175	355
Delaware	—	34	2	17	3	669	507	162	2
District of Columbia	—	60	4	N	N	N	N	N	6
Florida	4	988	80	213	33	118	67	51	59
Georgia	—	997	81	56	20	31	31	—	66
Maryland	—	426	31	123	16	1,651	1,113	538	112
North Carolina	2	N	N	65	13	122	27	95	34
South Carolina	1	382	27	26	9	44	35	9	9
Virginia	1	N	36	76	18	1,110	805	305	65
West Virginia	—	323	16	37	4	97	82	15	2
E.S. Central	1	1,298	96	137	32	70	24	46	36
Alabama	—	112	16	20	10	25	13	12	10
Kentucky	—	209	11	43	11	14	8	6	10
Mississippi	—	187	25	17	4	1	1	—	4
Tennessee	1	790	44	57	7	30	2	28	12
W.S. Central	11	1,967	197	229	41	86	37	49	143
Arkansas	2	185	13	20	6	—	—	—	4
Louisiana	—	247	29	29	2	7	3	4	13
Oklahoma	2	N	26	22	5	4	1	3	24
Texas	7	1,535	129	158	28	75	33	42	102
Mountain	6	1,714	142	135	34	44	29	15	75
Arizona	1	661	50	44	14	13	7	6	19
Colorado	—	429	35	24	10	—	—	—	24
Idaho	—	N	1	5	1	5	—	5	8
Montana	—	31	2	4	1	6	6	—	—
Nevada	4	107	9	18	1	10	10	—	8
New Mexico	1	273	20	9	5	1	1	—	2
Utah	—	183	23	27	2	5	2	3	14
Wyoming	—	30	2	4	—	4	3	1	—
Pacific	10	217	27	273	146	143	83	60	158
Alaska	—	138	19	1	1	10	4	6	8
California	7	N	N	219	97	70	61	9	108
Hawaii	1	79	8	4	6	N	N	N	4
Oregon	—	N	N	22	16	48	5	43	12
Washington	2	N	N	27	26	15	13	2	26
Territories									
American Samoa	—	N	—	N	N	N	N	N	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	2	—	N	N	N	1
U.S. Virgin Islands	—	—	—	—	—	N	N	N	—

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* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2012.

§ *Streptococcus pneumoniae*, invasive disease. The previous categories of invasive pneumococcal disease among children less than 5 years and invasive, drug-resistant Streptococcus pneumoniae were eliminated. All cases of invasive Streptococcus pneumoniae disease, regardless of age or drug resistance are reported under a single disease code.

TABLE 2. (*Continued*) **Reported cases of notifiable diseases,* by geographic division and area — United States, 2012**

Area	Measles			Meningococcal disease				
	Total	Indigenous	Imported	All Serogroups	Serogroup A, C, Y, and W-135	Serogroup B	Serogroup Other	Serogroup Unknown
United States	55	34	21	551	161	110	20	260
New England	1	—	1	15	6	4	2	3
Connecticut	1	—	1	4	2	2	—	—
Maine	—	—	—	3	2	—	1	—
Massachusetts	—	—	—	6	2	1	1	2
New Hampshire	—	—	—	—	—	—	—	—
Rhode Island	—	—	—	—	—	—	—	—
Vermont	—	—	—	2	—	1	—	1
Mid. Atlantic	9	1	8	85	17	21	2	45
New Jersey	2	1	1	14	—	—	—	14
New York (Upstate)	1	—	1	21	8	10	—	3
New York City	4	—	4	25	—	—	—	25
Pennsylvania	2	—	2	25	9	11	2	3
E.N. Central	17	13	4	72	34	24	6	8
Illinois	—	—	—	17	8	5	4	—
Indiana	15	13	2	8	2	5	—	1
Michigan	1	—	1	13	7	6	—	—
Ohio	1	—	1	25	14	4	1	6
Wisconsin	—	—	—	9	3	4	1	1
W.N. Central	6	4	2	40	5	4	—	31
Iowa	—	—	—	2	—	1	—	1
Kansas	6	4	2	6	4	1	—	1
Minnesota	—	—	—	12	1	1	—	10
Missouri	—	—	—	16	—	—	—	16
Nebraska	—	—	—	3	—	—	—	3
North Dakota	—	—	—	1	—	1	—	—
South Dakota	—	—	—	—	—	—	—	—
S. Atlantic	4	4	—	83	16	8	2	57
Delaware	1	1	—	1	1	—	—	—
District of Columbia	1	1	—	2	—	—	—	2
Florida	—	—	—	45	—	—	—	45
Georgia	2	2	—	11	5	2	—	4
Maryland	—	—	—	4	3	1	—	—
North Carolina	—	—	—	6	3	2	—	1
South Carolina	—	—	—	5	2	1	2	—
Virginia	—	—	—	5	—	1	—	4
West Virginia	—	—	—	4	2	1	—	1
E.S. Central	—	—	—	17	10	3	1	3
Alabama	—	—	—	6	3	—	1	2
Kentucky	—	—	—	1	1	—	—	—
Mississippi	—	—	—	3	—	2	—	1
Tennessee	—	—	—	7	6	1	—	—
W.S. Central	4	2	2	58	27	21	2	8
Arkansas	4	2	2	8	5	3	—	—
Louisiana	—	—	—	4	—	—	—	4
Oklahoma	—	—	—	9	3	4	2	—
Texas	—	—	—	37	19	14	—	4
Mountain	5	5	—	41	20	6	2	13
Arizona	2	2	—	6	6	—	—	—
Colorado	—	—	—	6	2	4	—	—
Idaho	—	—	—	4	1	—	—	3
Montana	—	—	—	10	4	2	1	3
Nevada	—	—	—	3	1	—	—	2
New Mexico	2	2	—	5	1	—	1	3
Utah	1	1	—	4	2	—	—	2
Wyoming	—	—	—	3	3	—	—	—
Pacific	9	5	4	140	26	19	3	92
Alaska	—	—	—	2	—	—	—	2
California	8	5	3	87	—	—	—	87
Hawaii	—	—	—	2	—	—	—	2
Oregon	1	—	1	25	14	10	—	1
Washington	—	—	—	24	12	9	3	—
Territories								
American Samoa	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
Puerto Rico	2	2	—	—	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

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TABLE 2. (*Continued*) **Reported cases of notifiable diseases,* by geographic division and area — United States, 2012**

Area	Mumps	Novel influenza A virus infections†	Pertussis	Plague	Psittacosis	Q fever		
						Total	Acute	Chronic
United States	229	313	48,277	4	2	135	113	22
New England	8	—	2,594	—	—	1	1	—
Connecticut	—	—	182	—	N	—	—	—
Maine	—	—	737	—	—	—	—	—
Massachusetts	6	—	648	—	—	1	1	—
New Hampshire	—	—	269	—	—	N	N	N
Rhode Island	2	—	113	—	—	—	—	—
Vermont	—	—	645	—	—	N	N	N
Mid. Atlantic	30	11	6,511	—	1	10	6	4
New Jersey	—	—	1,395	—	—	3	3	—
New York (Upstate)	6	—	2,715	—	—	3	1	2
New York City	20	—	456	—	—	1	—	1
Pennsylvania	4	11	1,945	—	1	3	2	1
E.N. Central	60	275	11,085	—	—	29	29	—
Illinois	32	4	2,026	—	—	4	4	—
Indiana	4	138	441	—	—	2	2	—
Michigan	10	6	845	—	—	3	3	—
Ohio	6	107	893	—	—	2	2	—
Wisconsin	8	20	6,880	—	—	18	18	—
W.N. Central	23	10	8,104	—	—	13	8	5
Iowa	6	1	1,736	—	—	N	N	N
Kansas	4	—	887	—	—	2	1	1
Minnesota	7	8	4,142	—	—	—	—	—
Missouri	5	1	815	—	—	3	2	1
Nebraska	1	—	240	—	—	6	3	3
North Dakota	—	—	214	—	—	—	—	—
South Dakota	—	—	70	—	—	2	2	—
S. Atlantic	22	15	2,891	—	—	15	15	—
Delaware	—	—	57	—	—	—	—	—
District of Columbia	2	—	26	—	—	N	N	N
Florida	5	—	575	—	—	1	1	—
Georgia	3	—	318	—	—	4	4	—
Maryland	—	12	369	—	—	1	1	—
North Carolina	2	—	612	—	—	9	9	—
South Carolina	1	—	224	—	—	—	—	—
Virginia	7	—	625	—	—	—	—	—
West Virginia	2	3	85	—	—	—	—	—
E.S. Central	6	—	1,260	—	—	5	3	2
Alabama	2	—	212	—	—	—	—	—
Kentucky	2	—	666	—	—	3	1	2
Mississippi	—	—	77	—	—	—	—	—
Tennessee	2	—	305	—	—	2	2	—
W.S. Central	22	—	2,692	—	—	15	10	5
Arkansas	1	—	248	—	—	1	1	—
Louisiana	2	—	72	—	—	—	—	—
Oklahoma	4	—	154	—	—	2	1	1
Texas	15	—	2,218	—	N	12	8	4
Mountain	15	1	6,097	2	—	18	13	5
Arizona	3	—	1,130	—	—	2	1	1
Colorado	7	—	1,494	1	—	9	8	1
Idaho	—	—	235	—	—	1	—	1
Montana	1	—	549	—	—	2	2	—
Nevada	—	—	112	—	—	—	—	—
New Mexico	—	—	924	1	—	1	1	—
Utah	3	1	1,591	—	—	3	1	2
Wyoming	1	—	62	—	—	—	—	—
Pacific	43	1	7,043	2	1	29	28	1
Alaska	—	—	353	—	—	—	—	—
California	34	—	795	—	1	22	22	—
Hawaii	1	1	73	—	—	—	—	—
Oregon	6	—	906	2	—	4	4	—
Washington	2	—	4,916	—	—	3	2	1
Territories								
American Samoa	—	—	—	—	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	4	—	1	—	—	N	N	N
Puerto Rico	4	—	—	—	N	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

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† Totals reported to the Influenza Division, NCIRD, as of December 31, 2012.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Rabies: Animal	Rabies: Human	Rubella	Rubella, Congenital syndrome	Salmonellosis	Shiga toxin-producing *E. Coli* (STEC)†
United States	4,478	1	9	3	53,800	6,463
New England	386	—	1	—	1,993	209
Connecticut	173	—	—	—	444	50
Maine	91	—	—	—	161	20
Massachusetts	—	—	1	—	1,036	96
New Hampshire	28	—	—	—	156	23
Rhode Island	28	—	—	—	108	2
Vermont	66	—	—	—	88	18
Mid. Atlantic	832	—	2	—	5,417	675
New Jersey	—	—	—	—	1,147	138
New York (Upstate)	420	—	1	—	1,395	243
New York City	13	—	1	—	1,180	85
Pennsylvania	399	—	—	—	1,695	209
E.N. Central	107	—	3	1	5,896	1,176
Illinois	—	—	1	1	1,970	218
Indiana	8	—	1	—	781	181
Michigan	59	—	—	—	995	285
Ohio	40	—	—	—	1,268	238
Wisconsin	N	—	1	—	882	254
W.N. Central	252	—	—	—	3,554	1,025
Iowa	33	—	—	—	622	181
Kansas	56	—	—	—	491	97
Minnesota	—	—	—	—	781	258
Missouri	28	—	—	—	1,071	308
Nebraska	—	—	—	—	353	102
North Dakota	75	—	—	—	66	32
South Dakota	60	—	—	—	170	47
S. Atlantic	1,334	—	2	1	15,344	610
Delaware	—	—	—	—	148	13
District of Columbia	—	—	—	—	70	8
Florida	103	—	—	—	6,523	93
Georgia	286	—	—	—	2,637	136
Maryland	325	—	2	1	951	74
North Carolina	—	—	—	—	2,200	162
South Carolina	—	—	—	—	1,452	25
Virginia	560	—	—	—	1,144	81
West Virginia	60	—	—	—	219	18
E.S. Central	71	—	—	1	4,229	308
Alabama	55	—	—	1	1,150	64
Kentucky	14	—	—	—	732	87
Mississippi	2	—	—	—	1,246	30
Tennessee	—	—	—	—	1,101	127
W.S. Central	899	—	—	—	8,697	705
Arkansas	131	—	—	—	1,404	69
Louisiana	4	—	—	—	1,544	27
Oklahoma	81	—	—	—	759	110
Texas	683	—	—	—	4,990	499
Mountain	313	—	—	—	2,465	723
Arizona	N	—	—	—	859	141
Colorado	183	—	—	—	509	175
Idaho	23	—	—	—	134	139
Montana	N	—	—	—	109	44
Nevada	18	—	—	—	185	37
New Mexico	47	—	—	—	334	55
Utah	15	—	—	—	260	107
Wyoming	27	—	—	—	75	25
Pacific	284	1	1	—	6,205	1,032
Alaska	6	—	—	—	59	N
California	252	1	1	—	4,562	588
Hawaii	—	—	—	—	341	20
Oregon	17	—	—	—	401	192
Washington	9	—	—	—	842	232
Territories						
American Samoa	—	—	4	—		
C.N.M.I.	—	—	—	—	—	—
Guam	—	—	—	—	13	—
Puerto Rico	27	—	—	N	165	4
U.S. Virgin Islands	—	—	—	—	—	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin positive, not serogrouped.

TABLE 2. (*Continued*) **Reported cases of notifiable diseases,* by geographic division and area — United States, 2012**

Area	Shigellosis	Spotted Fever Rickettsiosis†			Streptococcal toxic-shock syndrome	Syphilis§		
		Total	Confirmed	Probable		All Stages	Congenital (age <2 yr)	Primary & Secondary
United States	15,283	4,470	188	4,278	194	49,903	322	15,667
New England	212	26	1	25	37	1,118	1	474
Connecticut	46	—	—	—	19	121	—	55
Maine	7	3	—	3	10	22	—	17
Massachusetts	131	7	—	7	2	806	1	316
New Hampshire	8	2	—	2	—	64	—	36
Rhode Island	15	13	—	13	—	93	—	44
Vermont	5	1	1	—	6	12	—	6
Mid. Atlantic	2,478	204	6	198	27	7,544	15	1,947
New Jersey	952	128	—	128	10	883	1	229
New York (Upstate)	828	28	5	23	11	939	8	233
New York City	564	7	—	7	—	4,373	—	991
Pennsylvania	134	41	1	40	6	1,349	6	494
E.N. Central	2,568	232	11	218	74	5,147	51	1,839
Illinois	280	151	9	142	37	2,423	27	804
Indiana	161	33	2	28	17	531	—	224
Michigan	251	3	—	3	9	786	7	295
Ohio	1,749	23	—	23	10	1,138	16	425
Wisconsin	127	22	—	22	1	269	1	91
W.N. Central	973	349	5	344	2	1,111	3	399
Iowa	91	8	—	8	—	143	—	70
Kansas	130	—	—	—	—	129	—	24
Minnesota	390	15	—	15	—	335	1	118
Missouri	71	315	4	311	1	426	1	157
Nebraska	272	9	1	8	1	35	1	8
North Dakota	8	1	—	1	—	14	—	4
South Dakota	11	1	—	1	—	29	—	18
S. Atlantic	2,903	1,279	119	1,160	21	11,442	72	3,805
Delaware	22	30	—	30	—	106	1	38
District of Columbia	26	2	1	1	—	589	—	165
Florida	1,702	31	3	28	N	4,483	37	1,369
Georgia	660	92	92	—	—	2,432	14	937
Maryland	222	9	—	9	N	1,243	12	431
North Carolina	136	591	12	579	7	1,036	1	347
South Carolina	37	61	7	54	4	623	6	225
Virginia	91	461	4	457	7	906	1	285
West Virginia	7	2	—	2	3	24	—	8
E.S. Central	1,250	950	13	937	8	2,618	7	782
Alabama	332	167	3	164	N	705	4	216
Kentucky	426	62	3	59	8	390	2	150
Mississippi	285	25	2	23	N	456	—	150
Tennessee	207	696	5	691	—	1,067	1	266
W.S. Central	2,780	1,332	13	1,319	1	9,560	121	2,222
Arkansas	96	837	5	832	—	468	11	173
Louisiana	215	9	—	9	1	1,779	32	339
Oklahoma	543	409	6	403	N	256	—	83
Texas	1,926	77	2	75	N	7,057	78	1,627
Mountain	789	75	11	64	24	2,138	16	698
Arizona	444	50	10	40	—	787	14	202
Colorado	123	6	1	5	2	503	—	208
Idaho	9	4	—	4	—	53	—	26
Montana	11	3	—	3	N	3	—	2
Nevada	55	—	—	—	3	445	1	113
New Mexico	108	4	—	4	—	234	1	101
Utah	34	6	—	6	18	101	—	42
Wyoming	5	2	—	2	1	12	—	4
Pacific	1,330	23	9	13	—	9,225	36	3,501
Alaska	7	N	—	—	—	34	1	11
California	1,071	21	8	12	N	8,015	34	2,953
Hawaii	27	N	N	N	—	43	—	23
Oregon	92	1	—	1	N	424	1	212
Washington	133	1	1	—	N	709	—	302
Territories								
American Samoa	5	N	N	N	N	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	1	N	N	N	—	27	—	6
Puerto Rico	2	N	N	N	N	704	1	306
U.S. Virgin Islands	—	N	N	N	—	2	—	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Total case count includes four unknown case status reports.

§ Includes the following categories: primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis. Totals reported to the Division of STD Prevention, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) **Reported cases of notifiable diseases,* by geographic division and area — United States, 2012**

Area	Tetanus	Toxic-shock syndrome	Trichinellosis	Tuberculosis†	Tularemia
United States	37	65	18	9,945	149
New England	—	—	—	342	8
Connecticut	—	N	—	74	—
Maine	—	—	—	17	—
Massachusetts	—	—	—	215	8
New Hampshire	—	—	—	9	—
Rhode Island	—	—	—	23	—
Vermont	—	—	—	4	—
Mid. Atlantic	4	18	2	1,402	—
New Jersey	—	3	2	302	—
New York (Upstate)	—	9	—	215	—
New York City	1	—	—	651	—
Pennsylvania	3	6	—	234	—
E.N. Central	8	12	4	818	8
Illinois	1	4	1	347	4
Indiana	3	1	—	102	4
Michigan	2	6	1	149	—
Ohio	2	1	—	149	—
Wisconsin	—	—	2	71	—
W.N. Central	3	9	1	406	64
Iowa	—	1	—	46	1
Kansas	—	—	—	42	22
Minnesota	2	4	1	162	—
Missouri	1	4	—	89	27
Nebraska	—	—	—	22	6
North Dakota	—	—	—	26	3
South Dakota	—	—	—	19	5
S. Atlantic	7	11	4	1,901	5
Delaware	—	1	—	28	—
District of Columbia	—	—	1	37	—
Florida	4	N	—	679	—
Georgia	—	9	N	357	—
Maryland	—	N	1	224	2
North Carolina	—	—	—	211	1
South Carolina	2	1	—	122	—
Virginia	1	N	2	235	2
West Virginia	—	—	—	8	—
E.S. Central	2	3	—	459	6
Alabama	1	—	—	134	—
Kentucky	—	—	N	80	4
Mississippi	1	N	—	81	—
Tennessee	—	3	—	164	2
W.S. Central	5	1	1	1,540	39
Arkansas	—	1	N	70	22
Louisiana	—	—	—	149	—
Oklahoma	2	N	—	88	17
Texas	3	N	1	1,233	—
Mountain	2	4	1	457	10
Arizona	—	1	1	211	—
Colorado	1	—	—	64	1
Idaho	—	1	—	15	1
Montana	—	N	—	5	3
Nevada	—	—	—	82	1
New Mexico	1	—	—	40	1
Utah	—	2	—	37	2
Wyoming	—	—	—	3	1
Pacific	6	7	5	2,620	9
Alaska	1	N	5	66	2
California	4	7	—	2,191	2
Hawaii	—	N	—	117	—
Oregon	—	N	—	61	—
Washington	1	N	—	185	5
Territories					
American Samoa	—	N	N	1	—
C.N.M.I.	—	—	—	21	—
Guam	—	—	—	68	—
Puerto Rico	1	N	N	71	—
U.S. Virgin Islands	—	—	—	4	—

N: Not Reportable U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

TABLE 2. (*Continued*) **Reported cases of notifiable diseases,* by geographic division and area — United States, 2012**

Area	Typhoid fever	Vancomycin-intermediate *Staphylococcus aureus*	Vancomycin-resistant *Staphylococcus aureus*	Varicella Morbidity	Varicella Mortality†	Vibriosis§
United States	354	134	2	13,447	3	1,111
New England	17	3	—	1,424	—	118
Connecticut	2	—	—	265	—	24
Maine	—	—	—	258	—	10
Massachusetts	12	2	—	534	N	70
New Hampshire	1	N	—	142	—	3
Rhode Island	2	1	—	80	—	11
Vermont	—	—	—	145	N	—
Mid. Atlantic	97	40	—	1,327	1	80
New Jersey	20	3	—	466	1	41
New York (Upstate)	22	30	—	N	N	N
New York City	45	4	—	—	—	27
Pennsylvania	10	3	—	861	—	12
E.N. Central	47	25	—	3,583	—	51
Illinois	14	4	—	898	—	22
Indiana	4	N	—	469	—	6
Michigan	9	10	—	971	—	7
Ohio	15	9	—	806	N	11
Wisconsin	5	2	—	439	—	5
W.N. Central	13	21	—	881	—	27
Iowa	3	N	—	N	N	N
Kansas	1	N	N	395	—	N
Minnesota	5	1	—	—	—	15
Missouri	3	20	—	388	—	8
Nebraska	—	—	—	27	—	2
North Dakota	1	—	—	39	—	2
South Dakota	—	—	—	32	N	N
S. Atlantic	46	16	1	1,611	—	322
Delaware	—	—	1	3	—	6
District of Columbia	1	2	—	19	—	4
Florida	11	7	—	816	—	147
Georgia	12	1	—	51	—	29
Maryland	7	1	—	N	—	53
North Carolina	4	2	—	N	N	31
South Carolina	1	—	—	11	—	11
Virginia	10	2	—	505	N	41
West Virginia	—	1	—	206	—	N
E.S. Central	5	1	1	201	—	55
Alabama	1	1	—	190	N	20
Kentucky	—	N	N	N	N	2
Mississippi	1	—	—	11	N	16
Tennessee	3	—	1	N	—	17
W.S. Central	33	26	—	2,715	1	119
Arkansas	2	—	—	236	—	N
Louisiana	2	1	—	69	N	53
Oklahoma	—	2	—	N	N	—
Texas	29	23	—	2,410	1	66
Mountain	17	2	—	1,578	—	45
Arizona	7	2	—	535	—	29
Colorado	7	N	—	483	N	10
Idaho	—	N	N	N	N	N
Montana	—	N	N	132	—	N
Nevada	1	—	—	N	N	4
New Mexico	—	N	N	99	—	1
Utah	2	—	—	310	—	1
Wyoming	—	—	—	19	N	—
Pacific	79	—	—	127	1	294
Alaska	—	N	N	58	N	3
California	61	N	N	24	1	170
Hawaii	5	—	—	45	—	35
Oregon	2	N	N	N	N	19
Washington	11	N	—	N	—	67
Territories						
American Samoa	4	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	—	—	50	N	1
Puerto Rico	—	—	—	199	—	N
U.S. Virgin Islands	—	—	—	—	—	—

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* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

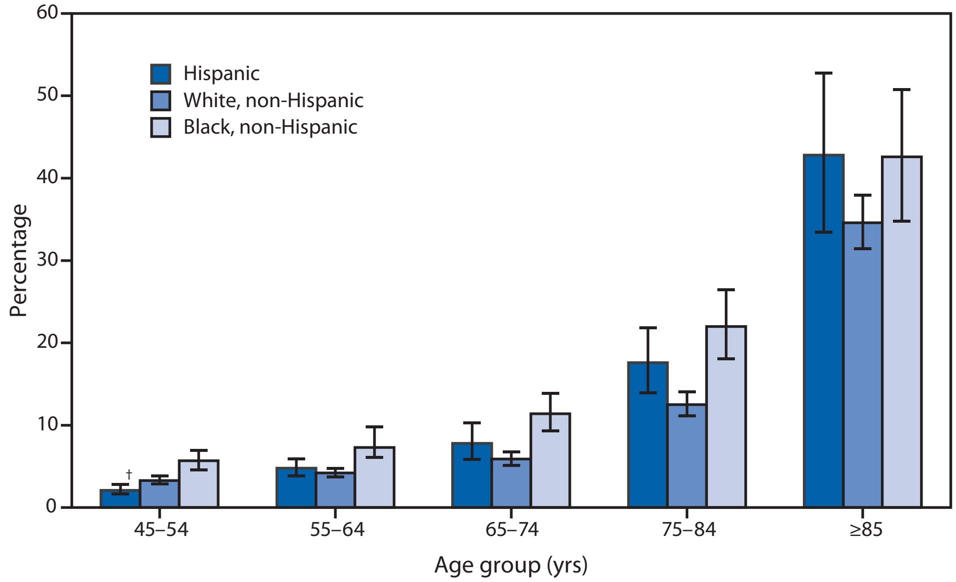
† Totals reported to the Division of Viral Diseases, NCIRD, as of May 1, 2013.

§ Vibriosis refers to any species of the family Vibrionaceae, other than toxigenic Vibrio cholerae O1 or O139.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Adults Aged ≥45 Years Who Need Help with Routine Activities* by Age Group and Selected Race/Ethnicity — National Health Interview Survey, United States, 2011



* Estimates are based on an affirmative response to the question, "Because of a physical, mental, or emotional problem, do you need the help of other persons in handling routine needs, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?"

† 95% confidence interval.

Needing help with routine activities increased steadily with age for all racial/ethnic groups. Non-Hispanic blacks were more likely to need help with routine activities compared with Hispanics and non-Hispanic whites among those aged 45–74 years. Among adults aged 45–54 years, Hispanics were least likely to need help with routine activities. However, the pattern changes among adults aged ≥75 years; Hispanics and non-Hispanic blacks were both more likely to need help with routine activities than non-Hispanic whites.

Sources: CDC. National Health Interview Survey, 2011.

CDC. Health Data Interactive. Available at http://www.cdc.gov/nchs/hdi.htm.

Reported by: LaJeana D. Howie, MPH, lhowie@cdc.gov, 301-458-4611.

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